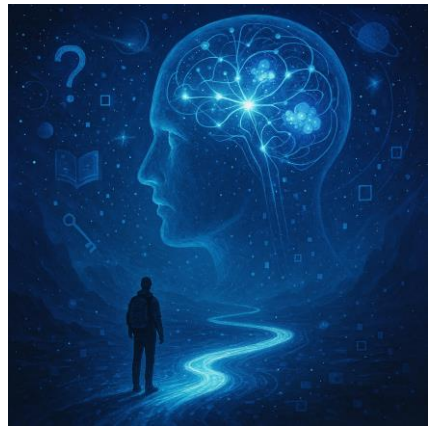
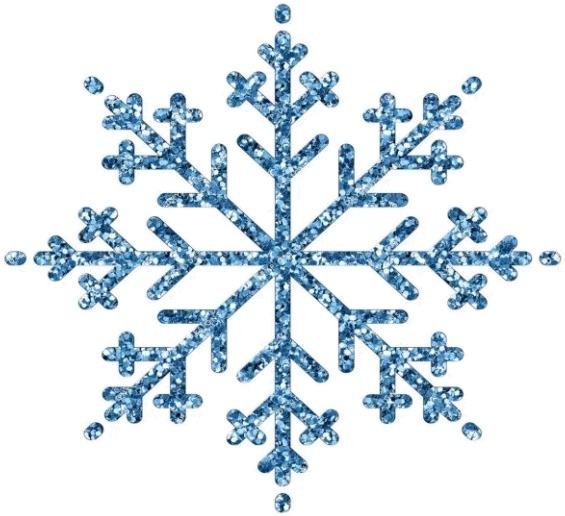
YEAR 11



BHA's Knowledge Quest

Autumn 2
(Nov - Dec)
2025-2026



Bristnall Hall Academy

How to use your Independent Study Booklet

To support you in making progress in each of your lessons, your teachers have produced Knowledge Organisers which contain all of the main facts, knowledge and information that you need to know to be successful and make progress this half term. There are lots of ways to use these Knowledge Organisers, but the most important thing is that you are revising the knowledge and
you are able to recall it in your lessons. Please see below details of how to use this booklet; what your half termly homework looks like and how to secure lots of positive Class Charts points!

English: 1 Seneca assignment set per week (alternating between Language and Literature). Sparx Reader will be used to accompany the reading of Literature set texts. Additional revision may be provided by individual class teachers.

Maths: 1 hour of Sparx Maths, individualised homework set every week. Pinpoint booklets provided following assessments and additional revision provided by class teacher, where appropriate.

Science: 1 hour of Seneca homework, set every week.

MFL: 1 hour of vocabulary / listening / reading practice on Language Nut every week and 30 minutes of learning vocabulary, ready to be quizzed in the following lesson.
History: 1 hour Seneca assignment set by class teacher, every week. Recap content using Knowledge Organiser and when provided, complete practice exam questions.
Geography: 1 hour Seneca, each week. 1 x Core vocabulary booklet, using OMG revision across the year.
DT: Engineering: Seneca - core knowledge recap, as well as flip learning resources, both printed and or on teams. Reading and comprehension tasks with booklets on teams. Hospitality and Catering: Yr 11- revision workbook, revision tasks set on Teams. Re-cap content using Knowledge Organiser.

Art: To complete/refine work for portfolio or set task projects when required.

Computing: 1 hour of Smart Revise. Individualised homework set weekly, based around previously taught topics and current topics.

Film Studies: The 15 or 10 marks 'Explore' exam question which focuses on an aspect of film language.

Sociology: 30 minutes of Senneca homework per week or an exam style question.

Sport: Year 11, 1 hour of exam revision from the revision guide & resources in Teams.

Child Development and Health & Social Care: Year 11, 1 hour of exam revision from the revision guide and resources on Teams.

All other subjects: Revise the information in this booklet using the revision sheets included with each subject.

Timetable

Use this page to copy out your lessons and room numbers

	W1 Mon	W1 Tues	W1 Wed	W1 Thurs	W1 Fri	W2 Mon	W2 Tues	W2 Wed	W2 Thurs	W2 Fri
1										
2										
3										
4										
5										
6										

Enrichment and Intervention 2025-26

Autumn Half Term 2

	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast 7.45am – 8.30am	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open	Start Right Club Library open
Lunch 12.45pm – 1.15pm	MUGA Year 9 Library Year 11 Yr 7 Table Tennis LG Yr 7, 8, 9 Keyboard club- Room 36 SW	MUGA Year 11 Library Year 10 Yr 8 Table Tennis LG	MUGA Year 10 Library Year 9 Yr 9 Table Tennis LG All Years Vocal Group /Choir Room 36 SW	MUGA Year 8 Library Year 8 Yr 10 Table Tennis LG	MUGA Year 7 Library Year 7 Yr 11 Table Tennis LG
Period 7 Monday Tuesday Thursday 3.30pm – 4.30pm Wednesday Friday 2.35pm – 3.35pm	Year 11 Open / MFL Subject Intervention Week 1: **B Block** Week 2: **C Block** Year 9 football (Field) WT All years Chess Club – Room 9 MAG All Years Debate Mate Room 23 BED Sparx Maths Club – Room 15 DHY / RMI All years Table Tennis (Large Gym) NK	Year 11 Science Intervention All years Table tennis (Large Gym) GH All years Basketball (MUGA) WT- New Year 7 and other beginners Latin Club Room 60 AA Year 8 football (Field) JS All years Dance Club (Dance studio) CG All years *Hooked on Bristnall* Room 53 JW	Year 11 English and Maths Intervention Year 7/8 Trampolining (Small Gym) KHA All years Table tennis (Large Gym) WT New Year 10 Football (Field) NK All years Dance Club (Dance studio) JR All years Board Game Club Room 55 AK All years The Rep Theatre – Performing Arts Club Room 16	Year 11 Geography /History Intervention Year 7 Football (Field) NK All years Legacy cohort Latin Club Room 60 AA All years Netball (MUGA) GH New Year 9/10 Trampolining (Small Gym) JS All years *The hook and pen society* Room 53 JW/LOM/ADI	All years Dungeons and Dragons (MB) Room 5 **Yr 10/11 Engineering** coursework catch up intervention- By invitation only LN **Yr 10/11Textiles** coursework catch up intervention- By invitation only NB/KWK
	All years Girl's Football (MUGA) JS/NW- New All years Task Master Room 28 GEG All years Science Club Lab 49 SAM/BHO/RHA Year 7 – 9 Masterchef Room 45 (limited to 15 pupils only) CCR/MSH/PCR **SEND** Reading Intervention ADI/LOM Room 2	All years Beyond the Books (Reading Club) Room 24 FH All years Digital skills Room 30 MCA Year 10 Rock Band- Room 36 SW Basketfields Booster for Year 10 English Room 23 FBA Masterchef **(SEND)** Room 45 CCR/MSH/MCS **SEND** Y8 Reading Intervention ADI/LOM 33	All years Geography Club Room 2 SBW All years Ultimate Uno Club Room 23 QSM All years Scene Stealers Filmmaker Club Room 22 DLA All years Act Up! Drama Club Room 24 SBS Yr 10 GCSE Computer Science students only: Programming practicals Room 62 JM Yr 10 iMedia students only: coursework catch-up Room 10 HA All years- The Articulators Board game articulate for kids RBi/ROOM 38 Year 7, 8 ,9 Girls Football WBA **SEND** Social Society CCR/CST Room 1 **SEND** WBA Multisports/Football LK	All Years Graphics club KWK 43 Year 7,8,9 Music Rock Band- Room 36 TW Russian Language Club for beginners Room 58 RMI	
			SEND Homework Club – JRE/MPA Room 31 **SEND** Y10 Direct Instruction Lit – JPG Room 3		

Academic	Creative	Physical
☐ Task Master (will meet all parts of the diploma) ☐ Latin Club (new and legacy co horts) ☐ Chess Club ☐ Sparx Maths Club ☐ Geography Club ☐ Science Club Lab 49 ☐ Debate Mate ☐ 'Beyond the Books' Reading Club ☐ Russian Language Club for Beginners ☐ Any other subject intervention	☐ Task Master (will meet all parts of the diploma) ☐ Scene stealers film maker club ☐ Act up! Drama Club ☐ Ultimate Uno ☐ Hooked on Bristnall - Crochet club ☐ The hook and pen society ☐ The REP Theatre Performing Arts Club ☐ Board Game Club ☐ Dungeons and Dragons ☐ Graphics Club ☐ Digital Skills ☐ Rock Band ☐ Lunchtime keyboard cub ☐ Lunchtime vocal choir ☐ Masterchef ☐ The Articulators	☐ Task Master (will meet all parts of the diploma) ☐ Football ☐ Table Tennis ☐ Basketball ☐ Netball ☐ Trampolining ☐ Dance

Dates to remember this half term:

November

December

Attendance record

Week	Attendance %
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Sparx Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the XRP score that you achieved for each subject. Your form tutor will award you additional CC points for the more XRP points you achieve in addition to the set points for each weekly homework.

	Sparx Reader Points:	Sparx Maths Points:
Week 1		
Week 2		
Week 3		
Week 4		
Week 5		
Week 6		
Week 7		
Total this half term:		

Seneca Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write the titles of the assignments that you complete for each subject and your overall percentage scores. Your form tutor will award you additional CC points for the highest percentages you achieve in addition to the set points for each weekly homework.

	English Assignments:	Science Assignments:	History Assignments:	Geography Assignments:
Week 1				
Week 2				
Week 3				
Week 4				
Week 5				
Week 6				
Week 7				
Total assignments completed this half term:				

Language Nut Check!

Remember to click: 'Login with Microsoft' using your academy email address and password!

In the boxes below, write out how many points you have achieved from your weekly homework. Your form tutor will award you additional CC points for the highest scores you achieve in addition to the set points for each weekly homework.

	MFL Homework:
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	
Total assignments completed this half term:	

Independent Study Check!

Your form tutor and your parent/carer will also check that you are completing your independent study within this booklet. Additional positive CC points will be awarded for beautiful presentation and your ability to demonstrate a strong recall of the knowledge within this booklet.

	End of Half term Form Tutor Check:	**Parent/Carer Check:**
Independent Study Completed?		
Beautiful Presentation?		
Recall of Knowledge?		

Personal Reflection: What are you most proud of within your Independent Study Booklet?

_____

_____

_____

_____

_____

Homework Log

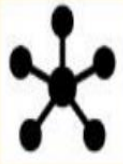
Use this page to record any homework this half term

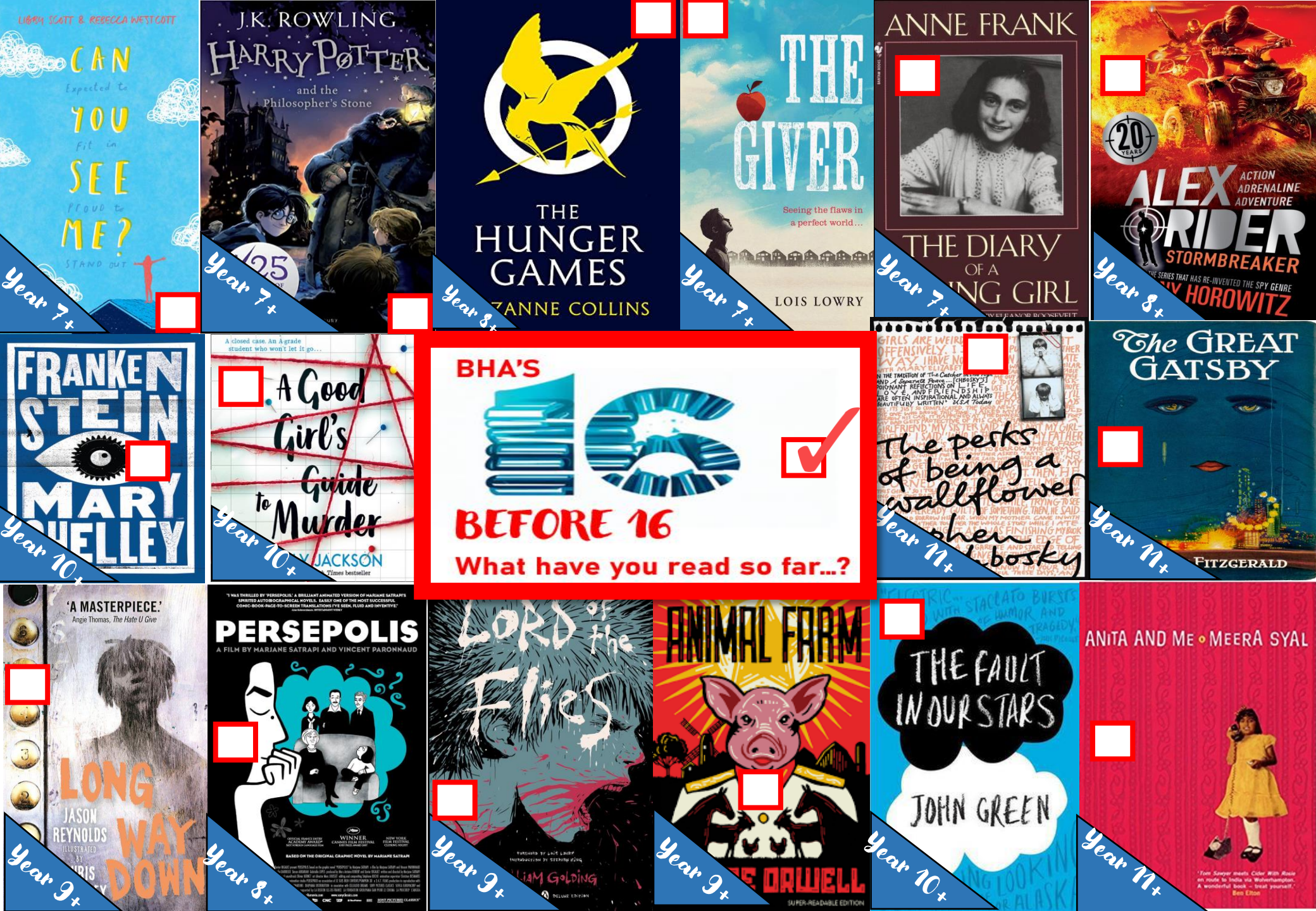
Subject	**Date Due:**	**Additional Notes:**

Homework Log

Use this page to record any homework this half term

Subject	**Date Due:**	**Additional Notes:**

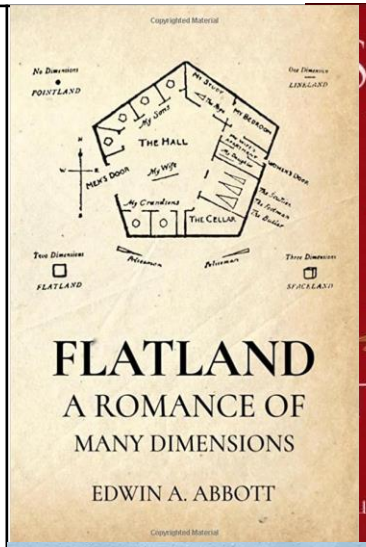
	Look, Cover, Write, Check	Definitions to Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your knowledge organiser. 	Write down the key words and definitions. 	Use your knowledge organiser to condense and write down key facts and or information on your flash cards. 	Use your knowledge organiser to create a mini quiz. Write down questions using your knowledge organiser. 	Create a mind map with all the information you can remember from your knowledge organiser. 	Ask a partner or family member to have the knowledge organiser or flash cards in their hands. 
Step 2	Cover or flip the knowledge organiser over and write down everything you remember. 	Try not to use your knowledge organiser to help you 	Add pictures to help support. Then self quiz yourself using the flash cards.. You can write questions on one side and answers on the other. 	Answer the questions and remember to use full sentences. 	Check your knowledge organiser to see if there were any mistakes with the information you have made. 	They can test you by asking you questions on different sections of your knowledge organiser. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat. 	Use your green pen to check your work. 	Use a parent/carer or friend to help quiz you on the knowledge. 	You can also use family to help quiz you. Keep self quizzing until you get all questions correct. 	Try to make connections that links information together. 	Write down your answers. 

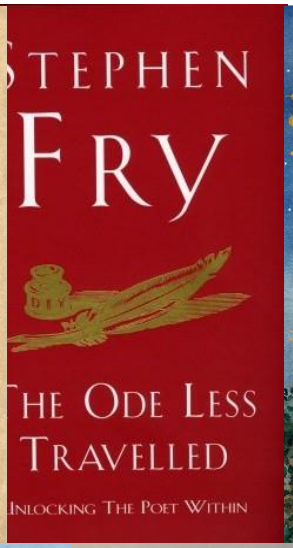

CAN YOU SEE ME?
Year 7+
J.K. ROWLING
HARRY POTTER
and the Philosopher's Stone
Year 7+
THE HUNGER GAMES
Year 8+
THE GIVER
Seeing the flaws in a perfect world...
LOIS LOWRY
Year 7+
ANNE FRANK
THE DIARY OF A
Year 7+
20 YEARS
ALEX RIDER
ACTION ADRENALINE ADVENTURE
STORMBREAKER
Year 8+
FRANKEN STEIN
MARY SHELLEY
Year 10+
A closed case. An A grade student who won't let it go...
A Good Girl's Guide to Murder
Year 10+
BHA'S
BEFORE 16
What have you read so far...?
The perks of being a wallflower
Year 11+
The GREAT GATSBY
FITZGERALD
Year 11+
'A MASTERPIECE.'
Angie Thomas, The Hate U Give
LONG WAY DOWN
JASON REYNOLDS
Year 9+
PERSEPOLIS
A FILM BY MARJANE SATRAPI AND VINCENT PARONNAUD
Year 8+
LORD of the Flies
Year 9+
ANIMAL FARM
Year 9+
THE FAULT IN OUR STARS
JOHN GREEN
Year 10+
ANITA AND ME • MEERA SYAL
Year 11+

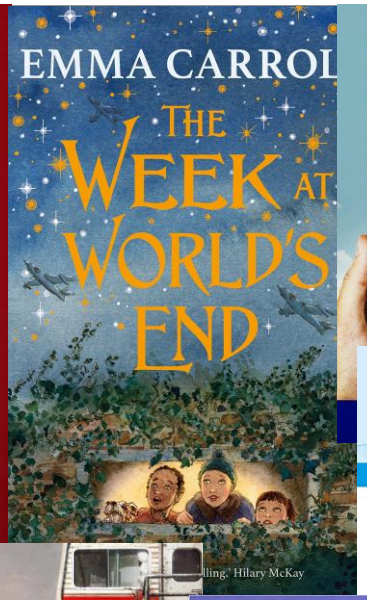
Contents page

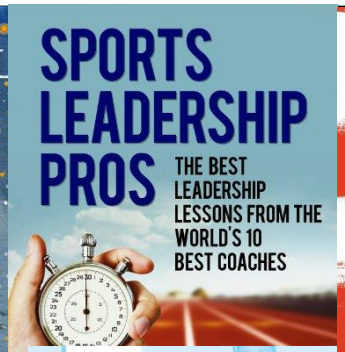
Further Reading List

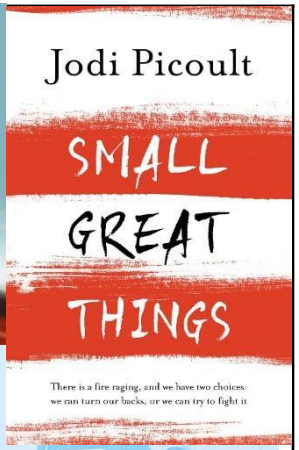
Year 11

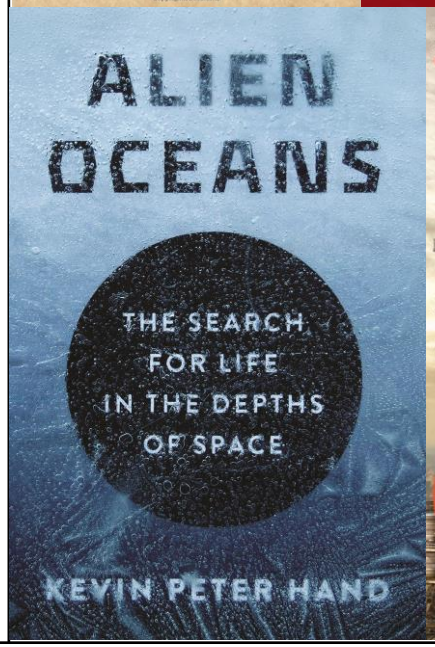


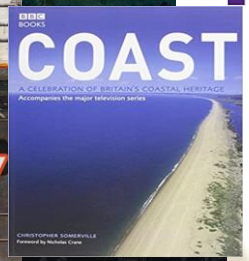












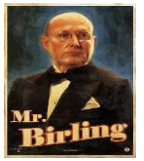
Challenge yourself by reading these topic-related books!

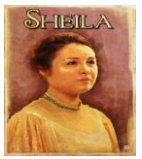
Act summary

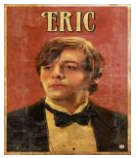
Act 1	The Birling family are celebrating the engagement of Sheila Birling to Gerald Croft. Inspector Goole arrives and tells them a young woman has committed suicide. The audience learns that Arthur Birling (the patriarch of the family) sacked the young woman (Eva Smith) but he is unremorseful. Sheila then got Eva sacked from her next job at a clothes shop due to being jealous. We then learn that Eva changed her name to Daisy Renton. Gerald is startled when he hears this name.
Act 2	We discover that Daisy was Gerald's mistress for some time but Gerald broke things off and turned her out. Sheila hands Gerald back the engagement ring. The Inspector questions Mrs Birling and Sheila forcefully encourages her mother to be honest and open. Eva/Daisy turns to the charity Sybil runs when she needs support for her unborn child. Mrs Birling shows no remorse, instead she says the girl tried to use the Birling name. She condemns the father of the child. Erica enters at this point.
Act 3	Eric confesses to having sex with Eva/Daisy when he was drunk. He reveals how he stole money from his father's company to support Eva and her unborn baby. The Inspector reminds the Birling family of their social responsibility and then leaves. Gerald returns and tells the family that the Inspector is a 'hoax.' The older generation and Gerald rejoice. Sheila and Eric are shocked that the others haven't learnt anything. A phone call at the end reveals a woman has committed suicide and an inspector will be visiting soon…

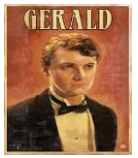
Themes – A theme is an idea or message that runs throughout a text.

Responsibility	All the family are forced to reflect upon their behavior towards Eva Smith/Daisy Renton and consider how responsible they are for her death. Some characters accept **responsibility** and feel **guilt**. On the other hand some are unwilling to accept any. *'We are members of one body. We are responsible for each other.' The Inspector's final speech.*
Social Class	Class **defines** each character in the play. There is a clear **hierarchy** in the class system that causes **oppression** of the lower class. The actions of the upper class directly **impact** on those below. *'If you don't come down sharply on some of these people, they'd soon be asking for the earth.' Mr. Birling.*
Gender	Throughout the play there is evidence that a woman is to be seen and not heard. The males hold a lot of **power** at the start. Eric's and Gerald's treatment of Eva/Daisy as an **object**. Young women challenge this (Sheila) and by the end **stereotypes** are beginning to be broken. *'...not only something to make 'me look prettier - but - well, a sort of sign or token of their self-respect.' Mr. Birling discussing women.*
Conflict among generations	Priestley uses age to show the **different attitudes** in society at the time. The older characters represent **outdated** ways of thinking; Sybil and Arthur believe in only looking after themselves. The younger characters represent a move towards caring about others in society. *'You're beginning to pretend now that nothing's really happened at all.' – Eric speaking to his parents.*









Context

J.B Priestley: The writer of the play and a social commentator who has a **social conscience**. A popular figure and keen supporter of social reform. He fought in World War I and saw the effects it had on the working class. During the 1930s he became an activist, campaigning about the effects of social inequality in Britain.

Pre and Post-War: Before WW1, there was an air of complacency that a war would actually break out, despite there being numerous strong hints. There were strong distinctions between upper/lower classes and women were subservient to men. After the WW2, the class distinction had been greatly reduced. Women had formed a more valuable and respected place in society. There was a greater desire for social reform.

Capitalism: Capitalism is where businesses aim to make money and a country's trade is owned by private companies/people. It is generally considered the opposite of socialism. Priestley deliberately criticizes the **selfishness** of this system and wants a fairer society. **Birling personifies this.**

Socialism: Socialism is an approach to economic and social systems that is characterized by social ownership, democratic control, and high levels of **equality.** They're generally concerned with ensuring that **inequalities between wealth and class are erased**. In the play, the **Inspector harbors socialist views.**

Social and Moral Responsibility: Attitudes towards social and moral responsibility changed rapidly in the time between when the play was set (1912) and the time when it was first performed (1946). In 1912, the general attitude of those with social and economic sway was towards looking after oneself and one's family. By the mid-1940s, however, Clement Attlee's Labour party won a landslide election, reflecting a wave of enthusiasm towards communal responsibility for everyone in society.

Titanic: RMS Titanic the largest British passenger ship at the time. It was a symbol of **progression** within society. It sunk in 1912 after striking an iceberg. It was one of the deadliest maritime disasters of the modern period and sent shockwaves around the world. It was supposed to be the pinnacle of comfort and safety and was frequently labelled **'unsinkable'.** However, during the disaster it was discovered that there wasn't enough lifeboats and the lower-class passengers were last to be given the chance of escape. Consequently more of these passengers died. It is worth remembering that Arthur holds the arrogant views of that many others did of the Titanic before it met its demise.

Genre and Conventions

Well-made play: This is a popular type of play from the 19th Century where all the events **build up to a climax**. It is primarily concerned with events that happened before the play. The plot is normally **intricate** and **complex**.

Morality play: This would be a play that **taught** the audience lessons that linked to the **seven deadly sins** where characters that committed these sins are **punished**.

English

Assessment Objectives

AO1: Response to question and use of quotations;

AO2: *Analysis of writer's methods using terminology and the exploration of the effects on reader;*

AO3: *Context and links to genre/themes;*

AO4: *Vocabulary and SPAG.*

Main Characters – Consider why Priestley included these characters. What is their purpose in the play? What might they personify?

Arthur Birling is the **patriarch** of the Birling family. His success in his business means his family live in the upper-middle class. He believes in **capitalistic** principles and rejects socialist beliefs. He considers Sheila's engagement **good for business.**
'And I'm talking as a hard-headed, practical man of business. And I say there isn't a chance of war.'

Sybil Birling is often described as being a **'cold'** character and is her husband's **'social superior.'** She is more concerned in ensuring her family does not '**lose face**.' She also serves in a charity committee that's aims are to assist women who need help.
'She was claiming elaborate fine feelings and scruples that were simply absurd in a girl in her position.'

Sheila Birling is the first character to **accept responsibility** and show **remorse**. She is **childish** at the start of the play but grows in **maturity.** Sheila takes on the role of the **inspector**, holding her family to account, once he departs.
'That's what I meant when I talked about building up a wall that's sure to be knocked flat.'

Eric Birling: Eric works for his father and has a drinking problem as he spends his time getting **'squiffy.'** He is **'half shy-half assertive.'** Only once all of his issues have been revealed are his family force to address his issues. He stands by his sister, Sheila, at the end.
'I don't know - really. Suddenly I felt I just had to laugh.'

Gerald Croft is the fiancé of Sheila and comes from a prosperous, well-know family. The Inspector criticizes Gerald's affair with Daisy but suggests Gerald is the least culpable for her death. Gerald goes out of his way to save his skin at the end suggesting his **capitalistic views** are entrenched and **will not learn** from his mistakes.
'The girl saw me looking at her and then gave me a glance that was nothing less than a cry for help.'

Inspector Goole is an **omniscient** character that seems to know all the answers before interviewing each character. He is in **command** of the situation despite others trying to put him off. He acts a **Priestley's mouthpiece.**
'He creates at once an impression of massiveness, solidity and purposefulness.'

Eva Smith/Daisy Renton is a young, working class woman, who is very important to the play, yet we never meet her. Her gruesome death is used to exploit the harsh treatment of the lower classes.

Edna is the Birling's maid and the only working-class character we see on stage.

Critical Verbs

Priestley wrote because he was influenced by what was going on in the world he was living in. Society, religion, politics, family and personal experiences and beliefs will all have impacted on **what** Priestley was writing and **why** he was writing it. Use the structure below to create points.

Writer	Uses	Character/setting/event	Critical Verb	Theme/concept/context
Priestley	uses	Arthur Birling the Birling's home the death of Eva Smith	to advocate to criticise to celebrate to warn to teach to expose to personify	the need for more social responsibility in a post-war society.

Symbols and Killer Quotations

'As if we were all mixed up together like bees in a hive - community and all that nonsense.'
- Simile exploring the Edwardian social structure.
- Bees produce honey. Is Priestley saying the product of socialism is 'sweet'?

'Unsinkable, absolutely unsinkable.'
- Like Mr. Birling's narrow-minded views? He won't be swayed and his views are 'unsinkable.'
- Microcosm of society on board.
- Society is doomed to 'sink' if people don't change.
- Dramatic irony.

'She'd swallowed a lot of strong disinfectant. Burnt her inside out, of course.'
- Disinfectant is used to clean and eradicate germs.
- Eva/Daisy being seen as something needed to be 'cleaned' from society. Is this how she sees herself by the end of her encounters?
- Link to the 'fire' mentioned in the Inspector's final speech?

The unborn child.
- Would 'merge' two classes together.
- He would be a Birling and the 'future' of the family. What does it say about their future?
- Impact on the innocent in society. Doomed from the start?

'Fire, blood and anguish.'
- Divine retribution.
- Foretelling the war. Does the Inspector know that the audience has not changed?
- Hell? Punishment for sins.

Threshold Concepts

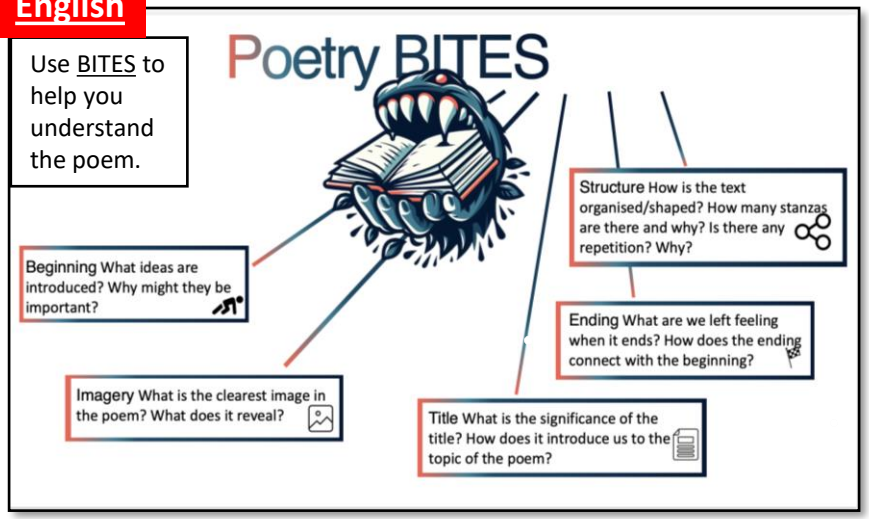
Time Theories.
Dunne believed we could begin to see forward in time through our dreams. We could look at our present actions and see the consequences of them. These would allow us to change.
Ouspensky believed that when we die we re-enter our life once more from the beginning. We are born again to the same parents and continue to repeat all the events of our life as before. We can escape repetition by improving ourselves and leading better lives.

Seven Deadly sins and virtues
Each character represents one of the sins (pride, lust, gluttony, sloth, avarice, wrath, envy). Eva/Daisy shows more virtues than the Birlings do.

Representation of women
Suffragettes (violent and aggressive) and suffragists (peaceful) were political groups focused on achieving power for women and the right to vote.
Consent to sex is something Eva/Daisy doesn't seem to give during her encounter with Eric. Priestley doesn't not class this as a sin for Eric. Raises questions about **misogyny** in society.

Social conditioning
Social conditioning is the sociological process of training individuals in a society to respond in a manner generally approved by the society in general and peer groups within society. The social context that Mr and Mrs Birling grew up in, is not that different to that of their children Eric and Sheila, yet JB Priestly had the latter two reform by the end of the play.

Use BITES to help you understand the poem.



Unseen Poetry

AO1 - Read, understand and respond to texts

AO2 - Analyse the language, form and structure

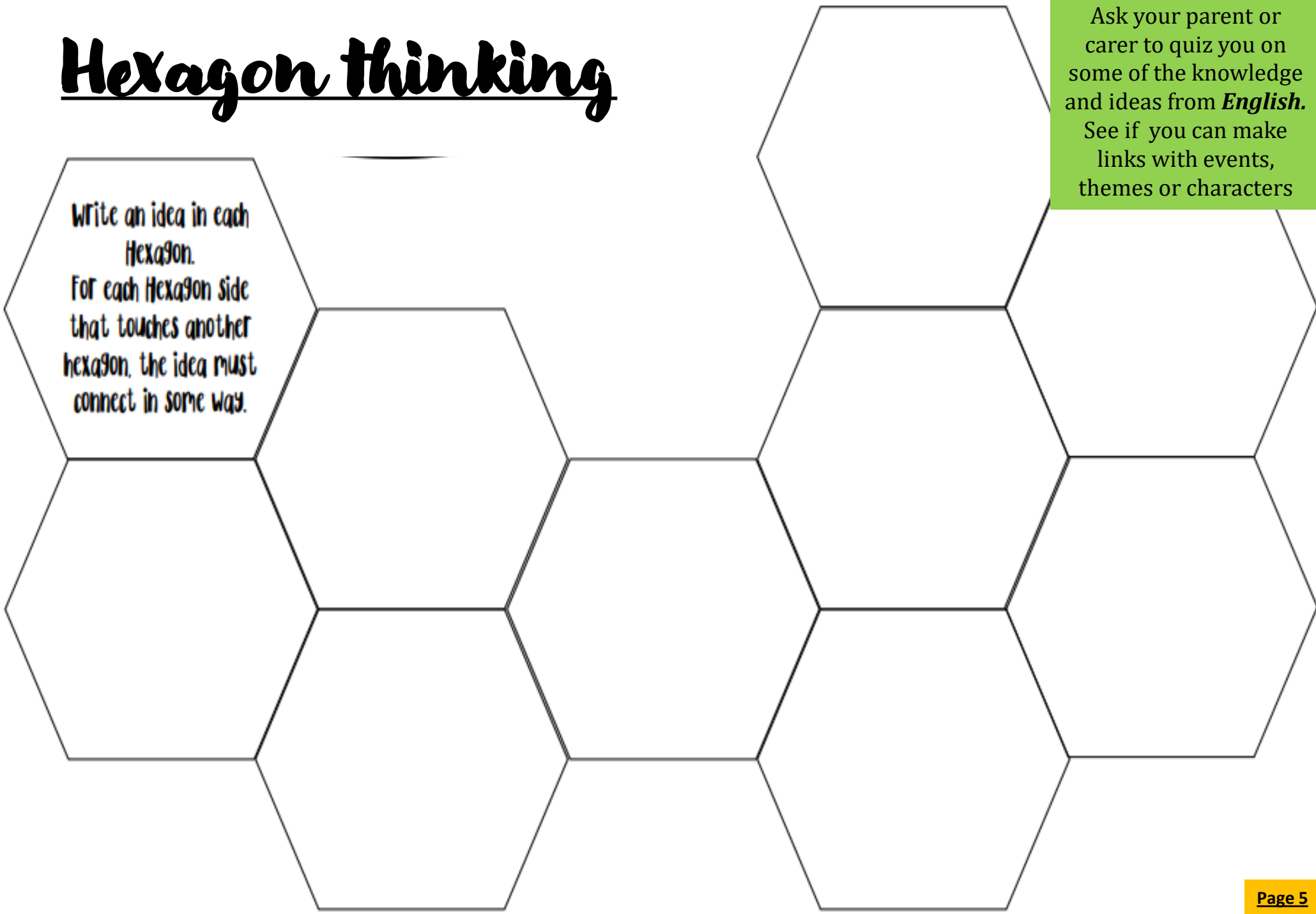
Poetic Language Devices			
Alliteration	Repeated first sound	Metaphor	Something is something
Assonance	Repeated vowel sound	Mood	Atmosphere
Consonance	Repeated consonant sound	Onomatopoeia	Word that sounds like it does
Colloquial Language	Local/casual language	Personification	A non-human thing is given human qualities
Emotive	Makes you feel emotional	Plosive	Letters p/t/k/b/d/g
Euphemism	Make something nasty sound okay	Question	Asks something
Extended Metaphor	A metaphor present throughout	Rhyme-Internal	Rhyme that is on the same line
Half Rhyme	Nearly rhymes	Semantic Field	Words about the same thing
Hyperbole	Exaggeration	Sibilance	A repeated s sound
Imagery	creates a mental image in the reader's mind	Simile	Comparison using like or as
Irony	Sarcasm	Symbolism	Something that represents something else

Poetry- Form	
Autobiographical	About the poet
Ballad	Story poem
Blank Verse	No rhyme
Concrete Poem	In the shape of the subject
Dramatic Monologue	Speaks to the reader
Epic	Tragic/heroic story poem (long)
First/Third person	Written as 'I'/He,She,They
Free Verse	No regular rhyme/rhythm
Lyrical	Emotional/beautiful
Narrative	Tells a story
Ode	Lyrical poem to one person
Sonnet	Love poem

Poetry Devices- Structure	
Anaphora/Epiphora	Repeated first words/last words on a line.
Chronological	Time order
Caesura	A break using punctuation
Enjambment	Run on lines.
Iambic Pentameter	5 beats in a line
Juxtaposition	Contrast
Layout	Position of lines on the page
Repetition	Repeated words/ideas
Rhyme Scheme	Organisation of the rhyme
Rhyming Couplet	Two lines that rhyme
Rhythm	The beat
Stanza/Verse	Paragraph
Volta	Turning point

Hexagon thinking

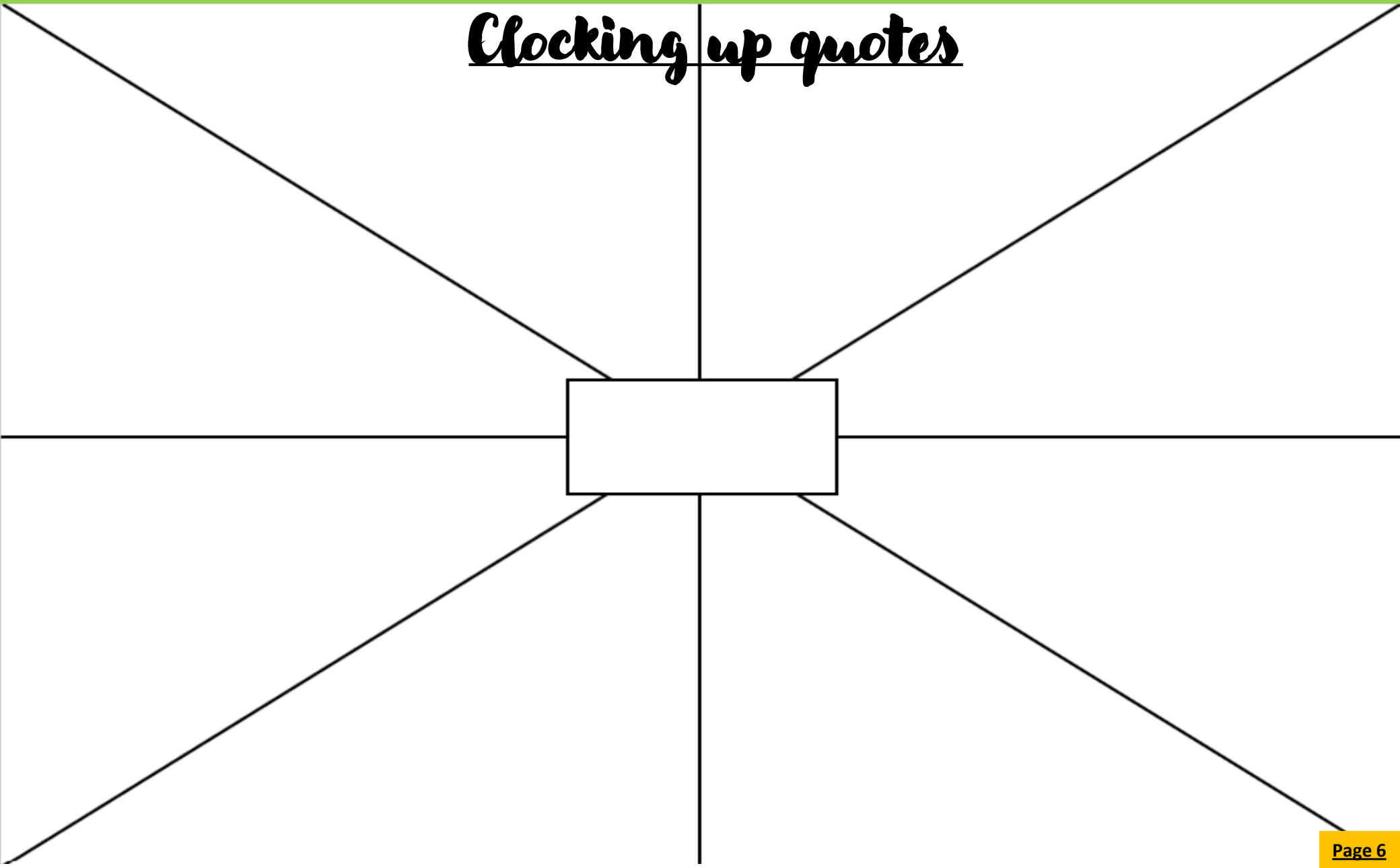
Write an idea in each Hexagon.
For each Hexagon side that touches another hexagon, the idea must connect in some way.



Ask your parent or carer to quiz you on some of the knowledge and ideas from ***English.*** See if you can make links with events, themes or characters

English. Choose what text you would like to revise and write that in the middle (e.g. Macbeth). Each section on the clock can either be a theme or character focus (e.g. Supernatural/ Banquo). Once you have decided on the focus, make notes including key quotes and contextual links that you could use in an exam about that question

Clocking up quotes



Maths

FRACTIONS 1

What do I need to be able to do?

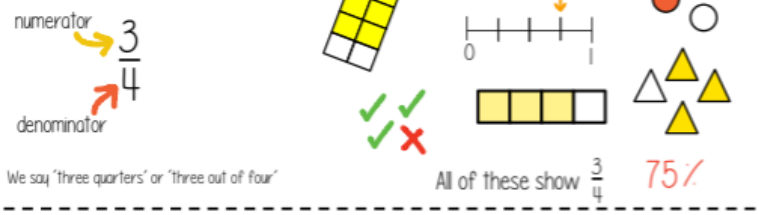
You should be able to:

- Understand different representations of fractions
- Fully simplify fractions
- Recognise and find equivalent fractions
- Convert between mixed numbers and improper fractions
- Add/subtract any fractions
- Add/subtract mixed numbers

Key Words

- Numerator: the top number of a fraction
- Denominator: the bottom number of a fraction
- Equivalent: of equal value
- Mixed Number: a number with an integer and a proper fraction
- Improper Fraction: a fraction where the numerator is larger than the denominator
- Coprime: two numbers which share no common factors (except 1)

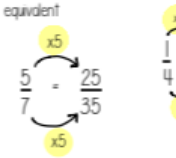
Representing Fractions



Equivalent Fractions

Two fractions are equivalent if they represent the same quantity

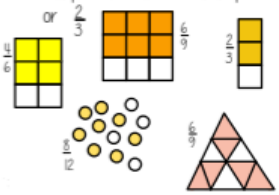
If the numerator and denominator have the same multiplier, they are equivalent



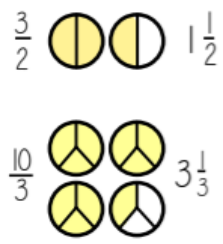
Each of these diagrams represents an equivalent amount.

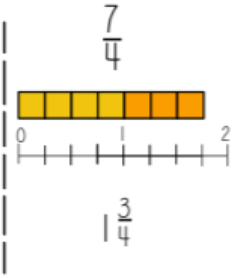
They all show '2 out of every 3'

or 2/3



Mixed Numbers and Improper Fractions





Fractions can represent more than one whole.

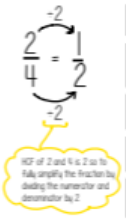
The denominator tells us how many parts make up one whole

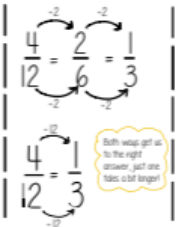
9/5 — This tells us that one whole is made up of 5 parts. We have 9 parts, so we can make one whole plus 4 parts.

1 4/5

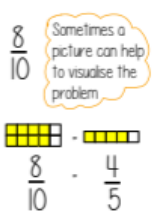
Simplifying Fractions

You must always simplify you fractions if you can





Sometimes a picture can help to visualise the problem



Once you cannot find a common factor, the fraction is fully simplified

7/10

This fraction is fully simplified as 7 and 10 have no common factors. We can say that 7 and 10 are COPRIME

Adding/Subtracting Fractions — Common denominators

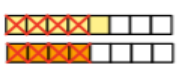
Page 7

2/7 + 4/7

2/7 + 4/7 = 6/7

Remember that the denominator doesn't change

5/8 - 4/8



5/8 - 4/8 = 1/8

We can just subtract 4 from 5!

1/10 + 3/10

1/10 + 3/10 = 4/10 = 2/5 (÷2)

4 and 10 have a common factor (2)

You must always fully simplify you fractions

Adding/Subtracting Fractions — Common multiples

3/5 + 1/10

10 is a multiple of 5 (5 x 2) so, using equivalent fractions we can say: 3/5 = 6/10

6/10 + 1/10 = 7/10

3/4 - 1/12

12 is a multiple of 4 (4 x 3) so, using equivalent fractions we can say: 3/4 = 9/12

9/12 - 1/12 = 8/12 = 2/3

Remember you must always fully simplify your fractions!

1/2 + 2/3 + 1/6

Here, we know that 2 and 3 share a common multiple of 6, so we can say 1/2 = 3/6 and 2/3 = 4/6

3/6 + 4/6 + 1/6 = 8/6 = 4/3 = 1 1/3

Simplify

We need to give our answer as a mixed number

Adding/Subtracting Fractions — Different denominators

1/5 + 3/4

We need to find a common denominator using equivalent fractions

1/5 (x4) = 4/20

3/4 (x5) = 15/20

19/20

3/11 + 2/3 = 9/33 + 22/33 = 31/33

the LCM of 3 and 11 is 33, so our equivalent fractions are; 3/11 = 9/33, 2/3 = 22/33

5/7 + 4/9 = 45/63 + 28/63 = 73/63 = 1 10/63

Let's convert it to a mixed number

Remember you can find the LCM of 7 and 9 by listing their multiples;
7, 14, 21, 28, 35, 42, 49, 56, 63, 70
9, 18, 27, 36, 45, 54, 63, 72,

Adding/Subtracting Mixed Numbers

Method 1

1 3/4 + 2 1/2

We have three 'wholes'. 3/4 + 1/2

3/4 - 1/2 = 3/4 - 2/4

- 5/4

- 1 1/4

So we have:

3 + 1 1/4 = 4 1/4

Method 2

1 3/4 + 2 1/2

1 3/4 = 7/4

2 1/2 = 5/2 = 10/4 (x2)

7/4 + 10/4 = 17/4 = 4 1/4

How many times does 4 go into 17? 4, 8, 12, 16, 20

4 with a remainder of 1

FRACTIONS 2

What do I need to be able to do?

You should be able to:

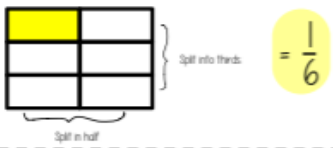
- Multiply unit fractions
- Multiply non-unit fractions
- Use cross-cancelling to simplify fractions before multiplying
- Divide integers by fractions
- Divide fractions by fractions
- Find fractions of amounts
- Use a given fraction to find the whole
- Find the reciprocal of an integer/fraction

Key Words

- Numerator: the top number of a fraction
- Denominator: the bottom number of a fraction
- Unit fraction: a fraction with a numerator of one
- Commutative: changing the order of the operations doesn't change the result
- Reciprocal: the reciprocal of a number is 1 divided by the number
- Coprime: two numbers which share no common factors (except 1)

Multiplying unit fractions

$\frac{1}{2} \times \frac{1}{3}$ "One half of one third"



$= \frac{1}{6}$

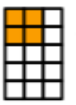
Multiplying any fractions

See cross-cancelling for a quicker method!

Example 1

$\frac{2}{3} \times \frac{2}{5} = \frac{4}{15}$

"Two thirds of two fifths"



Another way to think of it: Two parts out of three parts on two out of five rows

Example 2

$\frac{5}{7} \times \frac{14}{15} = \frac{5 \times 14}{7 \times 15} = \frac{70}{105}$

Remember to simplify as where possible!

$= \frac{2}{3}$

Example 3 $1\frac{1}{2} \times 2\frac{1}{3}$

$\frac{3}{2} \times \frac{7}{3} = \frac{21}{6} = \frac{7}{2}$

$= 3\frac{1}{2}$

Cross Cancelling Method

$\frac{2}{3} \times \frac{6}{7} = \frac{4}{7}$

(6 and 3 both have a common factor of 3, so we can divide both by 3)

This method means that we do not need to simplify our answer as it should be fully simplified already!

Example 1

$\frac{5}{9} \times \frac{18}{25}$

this becomes

$\frac{1}{1} \times \frac{2}{5} = \frac{2}{5}$

Remember, Multiply the numerators then multiply the denominators

Example 2

$\frac{15}{27} \times \frac{36}{45}$

this becomes

$\frac{1 \times 4}{3 \times 3} = \frac{4}{9}$

Dividing integers by a unit fraction

$3 \div \frac{1}{3}$ Think of this as 'how any times does a third go into 3?'

there are three thirds in one whole, so there are 9 thirds in 3 wholes

Reciprocals

A number multiplied by its reciprocal is always 1

$2 \times \frac{1}{2} = 1$

$5 \times \frac{1}{5} = 1$

The reciprocal of a is $\frac{1}{a}$

Dividing by a fraction, $\frac{1}{a}$, is the same as multiplying by its' reciprocal, a

Example

$3 \div \frac{1}{3} = 9$

$3 \times 3 = 9$

Dividing Fractions

Example 1

$\frac{2}{3} \div \frac{5}{7}$

$\frac{2}{3} \times \frac{7}{5}$

$\frac{2 \times 7}{3 \times 5}$

$\frac{14}{15}$

Example 2

$\frac{5}{12} \div \frac{25}{18}$

$\frac{5}{12} \times \frac{18}{25}$

$\frac{1 \times 3}{2 \times 5}$

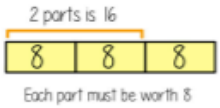
$\frac{3}{10}$

Finding Fractions of Amounts

Find $\frac{1}{2}$ of 10 "Share 10 into 2 equal parts"

Find $\frac{2}{3}$ of 24

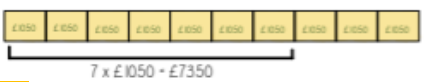
$\frac{1}{3}$ is 8 as 24÷3=8



$\frac{2}{3}$ of 24 = 16

Find $\frac{7}{10}$ of £105

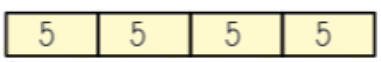
£105 ÷ 10 = £10.50



$\frac{7}{10}$ of £105 = £73.50

Reverse Fractions of Amounts

$\frac{3}{4}$ of a number is 15. What is the number?

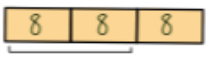


15

If 3 parts = 15, then one part must = 5

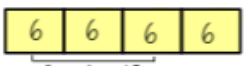
The original number was 20

$\frac{2}{3}$ of a number is 16. What is $\frac{3}{4}$ of the number?



If 2 parts = 16, then one part must = 8

The number is 8 x 3 = 24. So what is $\frac{3}{4}$ of 24?

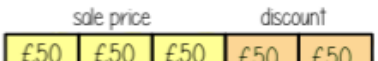


One quarter is 6

= 18

Worded problem

A TV is on sale for 2/5 off the price. It now costs £150. How much did it cost originally?



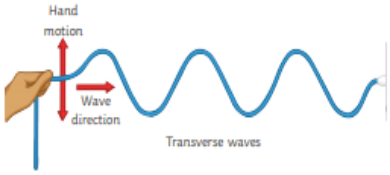
So the original price of the TV was 5 x £50 = £250

Science

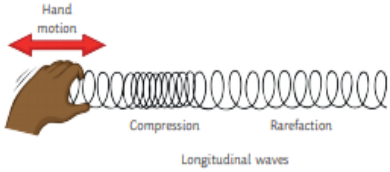
Transverse and Longitudinal Waves

Waves can be either **transverse** or **longitudinal**.

In a transverse wave, the vibrations are at a right angle (**perpendicular**) to the direction of the energy transfer. The wave has **peaks** (or crests) and **troughs**. Examples include **water waves** and **light waves**.

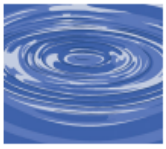


In a longitudinal wave, the vibrations are in the same direction (**parallel**) as the energy transfer. The wave has areas of **compression** and **rarefaction**. Examples of this type of wave are **sound waves**.

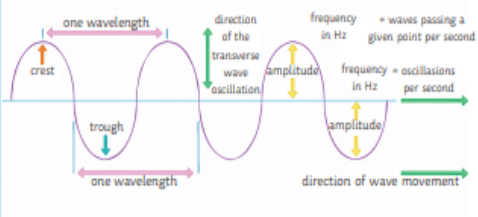


When a wave travels, energy is transferred but the matter itself does not move. Particles of water or air vibrate and transfer energy but do not move with the wave.

This can be shown by placing a cork in a tank of water and generating ripples across the surface. The cork will bob up and down on the **oscillations** of the wave but will not travel across the tank.



Properties of Waves



The **frequency** of a wave is the number of waves which pass a given point every second.

time period (s) = 1 ÷ frequency (Hz)

$t = 1 \div f$

The **wave speed** is how quickly the energy is transferred through a medium (how quickly the wave travels).

wave speed (m/s) = frequency (Hz) × wavelength (m)

$v = f \times \lambda$

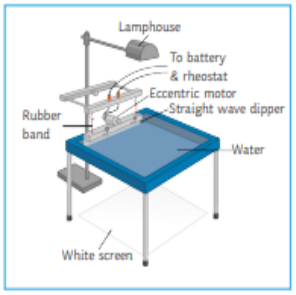
The speed of **sound waves** travelling through air can be measured by a simple method. One person stands a measured distance from a large flat wall, e.g. 100m. The person then claps and another person measures the time taken to hear the echo. The speed of the sound can then be calculated using the equation

speed = distance × time.

Remember the distance will be double because the wave has travelled to the wall and back again. It is important to take several measurements and calculate the average to reduce the likelihood of human error.

Required Practical Investigation 8

Aim: make observations and identify the suitability of apparatus to measure the frequency, wavelength and speed of waves in a ripple tank and waves in a solid, and take appropriate measurements.



The **ripple tank apparatus** shown is the most commonly used for this investigation. It is likely you will work in groups or observe the investigation as a demonstration by your teacher.

Method (assuming the apparatus is already set-up):

Turn on the power and observe the waves. Make any necessary adjustments to the equipment so that the waves are clear to observe (alter the voltage supplying the motor). **N.B. The lowest frequency setting on the motor will ensure that the waves measurements can be made more easily.**

To measure the **wavelength**, use the metre ruler and make an estimate quickly. You may want to use a **stroboscope** and freeze the wave patterns to make measurements.

Record 10 wavelengths and calculate the **average** value.

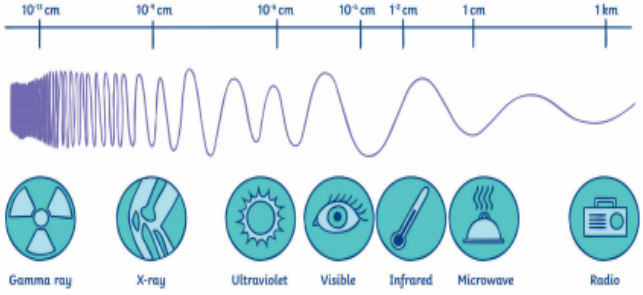
To measure the wave **frequency**, mark a given point onto the white paper and **count** the number of waves which pass the point within **10 seconds**. Divide your answer by 10 to find the number of **waves per second**.

Record 10 frequencies and calculate the **average** value.

To calculate the wave speed, use this formula:
speed = frequency × wavelength

The Electromagnetic Spectrum

Electromagnetic waves transfer energy from a source to an **absorber** as **transverse** waves. The different waves are grouped depending on their **frequency** and form a continuous spectrum known as the **electromagnetic spectrum**. Each of the frequencies of waves travel at the same **velocity** and can pass through a **vacuum** as well as **air**.



Frequency	Wave	Use	Other Information
Low ↓ High	radio waves	Communication via television and radio, and satellite communications.	Easily transmitted through air and can be reflected to change their direction. Harmless if absorbed by the human body. Are reflected back off the atmosphere and cannot pass through into space.
	microwaves	Communications including satellite communications and cooking food.	When the molecules absorb microwaves, their internal energy increases. This can be harmful when internal body cells become heated by over exposure to microwaves. Can pass through the atmosphere and into space.
	infrared	Short-range communications (remote controls), electrical heaters, cooking food, optical fibres, security systems and thermal imaging cameras.	It can cause burns to skin.
	visible light	Used for lighting, photography and fibre optics.	Frequency range that is detectable by the human eye.
	ultraviolet	Sterilising water and killing bacteria. Detecting forged bank notes.	Causes skin tanning and can lead to burns or skin cancer.
	X-rays	Medical imaging and airport security scanners.	Very little energy is absorbed by body tissues. Instead, it is transmitted through the body. These waves can lead to gene mutation and cancer.
	gamma rays	Sterilising medical equipment or food and treatment for some cancers.	

You can remember the order of the electromagnetic spectrum easily with the phrase:

Roman men invented very unusual X-ray guns.

Required Practical Investigation 10

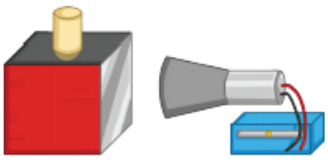
Aim: investigate how the amount of infrared radiation absorbed or radiated by a surface depends on the nature of that surface.

In this investigation, you are finding out which type of surface emits the most **infrared** radiation:

- **dark and matt**
- **dark and shiny**
- **light and matt**
- **light and shiny**

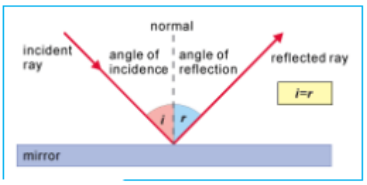
Method:

1. Place the **Leslie cube** on a heatproof mat.
2. Once the kettle has boiled, fill the Leslie cube with hot water.
3. Ensuring that the **thermometer** or the **infrared detector** is an **equal distance** from each of the surfaces (in turn) on the Leslie cube, measure the amount of infrared radiation emitted.
4. Repeat the experiment twice more to collect three results for each surface.

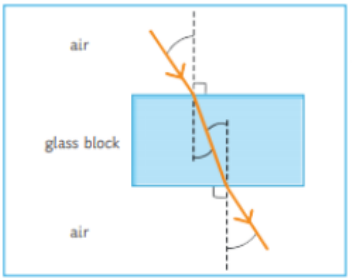


Properties of electromagnetic waves

Science



Reflection



Refraction

You should be able to complete or construct a **ray diagram** to show how a wave is **refracted** at the boundary of a different medium.

As the wave moves **to** a more dense medium (e.g. from gas to solid), it slows down and bends so that the angle from the normal becomes smaller. The angle of incidence is larger than the angle of refraction.

As the wave moves **from** a more dense medium (e.g. from solid to gas), it speeds up and bends so that the angle from the normal becomes larger. The angle of refraction is larger than the angle of incidence.

The angle at which a wave enters the glass block is equal to the angle that it leaves the glass block (when entering and leaving the same medium); however, if a wave crosses a boundary between two mediums at an angle of 90°C, then it will not change direction but instead carry on in a straight line.

Gamma rays occur as the result of changes to the nuclei of atoms and atoms themselves. It is a form of radiation and the waves can be generated and absorbed across a wide range of frequencies.

UV, X-rays and **gamma** are all types of **radiation** and can be **harmful** to human health; they cause damage to human body tissues. The severity of the damage caused depends on the dose of radiation a tissue or cell is exposed to. **Radiographers** and dentists who routinely carry out X-ray examinations wear a device to monitor the amount of exposure and ensure they are within a **safe limit**.

X-rays and gamma rays are **ionising** and can cause **mutations** to genes which may result in **cancer**.

UV waves can cause the skin to burn and age prematurely. UV exposure also increases the risk of developing **skin cancer**.

Radio Waves (Higher tier only)

Oscillations in **electrical circuits** can produce **radio waves** which when absorbed by a conductor, produce an **alternating current**.

The alternating current has the same **frequency** as the radio wave and so information can be coded for transmission. This is how **television** and **radio** are broadcast.

Inheritance, Variation and Evolution Knowledge Organiser

Science

Keywords

allele – An alternative form of a gene.

asexual reproduction – The production of offspring from a single parent by mitosis. The offspring are clones of the parent.

chromosome – Structures that contain the DNA of an organism and are found in the nucleus.

cystic fibrosis – A disorder of cell membranes that is caused by a recessive allele.

DNA - A polymer that is made up of two strands that form a double helix.

dominant – An allele that is always expressed, even if only one copy is present.

fertilisation – The fusion of male and female gametes.

gamete – Sperm cell and egg cell in animals; pollen and egg cell in plants.

gene – A small section of DNA that codes for a specific protein.

genome – The entire genetic material of an organism.

genotype – The combination of alleles.

heterozygous – A genotype that has two different alleles, one dominant and one recessive.

homozygous – A genotype that has two of the same alleles. Either two dominant alleles or two recessive alleles.

meiosis – The two-stage process of cell division that reduces the chromosome number of the daughter cells. It makes gametes for sexual reproduction.

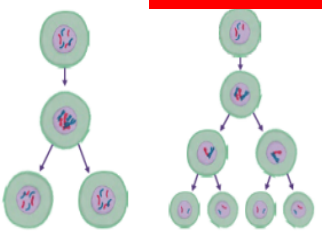
mutation – A change in DNA.

phenotype – The characteristic expressed because of the combination of alleles.

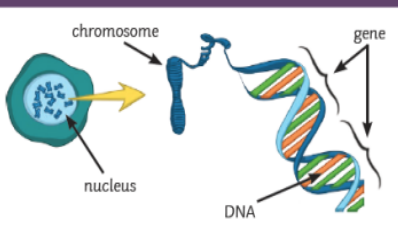
polydactyly – Having extra fingers or toes. It is caused by a dominant allele.

recessive – An allele that is only expressed if two copies of it are present.

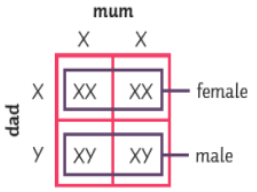
sexual reproduction – The production of offspring by combining genetic information from the gametes of two parents. Leads to variation in the offspring.



Mitosis	Meiosis
Produces two daughter cells.	Produces four daughter cells.
Daughter cells are genetically identical.	Daughter cells are not genetically identical.
The cell divides once.	The cell divides twice.
The chromosome number of the daughter cells is the same as the parent cells. In humans, this is 46 chromosomes.	The chromosome number is reduced by half. In humans, this is 23 chromosomes.
Used for growth and repair, and asexual reproduction.	Produces gametes for sexual reproduction.

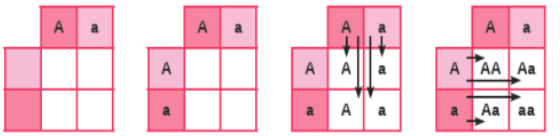


Sex Determination



Females carry two X chromosomes.
Males carry one X and one Y chromosome.

How to Complete a Punnet Square



Step 1: Put the two alleles from one parent into the boxes at the top. This parent is a heterozygote. This means they have one dominant and one recessive allele.

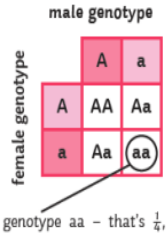
Step 2: Put the two alleles from the second parent into the boxes on the left. This parent is also a heterozygote.

Step 3: Put the alleles from the first parent into the two boxes underneath them.

Step 4: Put the alleles from the second parent into the two boxes to the right of them.

Probability

There are four possible combinations of gametes that offspring can inherit.



One of these four has the genotype aa – that's $\frac{1}{4}$, 25% or 0.25.

The recessive phenotype has a ratio of 1:3 because only one combination will show the phenotype while the other three will not.

Keywords

embryo screening – Genetic tests carried out on an embryo to see whether it carries a faulty allele.

evolution – A change in the inherited characteristics of a population over time through a process of natural selection.

evolutionary tree – A method used to show how scientists believe organisms are related.

extinction – The permanent loss of all members of a species.

fossils – The remains of organisms from millions of years ago which are found in rocks.

genetic engineering – The process by which scientists manipulate and change the genotype of an organism.

natural selection – The process by which organisms that are better suited to an environment are more likely to survive and reproduce.

selective breeding – Humans selecting animals or plants, that have a required characteristic, for breeding.

speciation – The process by which two species evolve from a single original species by natural selection. The two populations have become so different that they can no longer interbreed to produce fertile offspring.

variation - Differences in characteristics of individuals in a population.

Variation

Variation maybe be due to differences in:

- the genes that have been inherited (genetic causes);
- the conditions in which they have developed (environmental causes);
- a combination of genes and the environment.

Evolution

All species of living things have evolved from simple life forms by natural selection.

- If a variant/characteristic is advantageous in an environment, then the individual will be better able to compete.
- This means they are more likely to survive and reproduce.
- Their offspring will inherit the advantageous allele.

Fossils

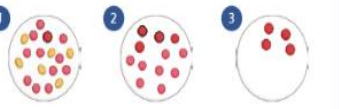
Fossils could be:

- the actual remains of an organism that has not decayed;
- mineralised forms of the harder parts of an organism, such as bones;
- traces of organisms such as footprints or burrows.

Many early life forms were soft-bodied so have left few traces behind.

Fossils help us understand how much or little organisms have changed as life developed on earth.

Resistant Bacteria



There is variation in the bacterial population. One bacterium develops a mutation by chance that means it is resistant to an antibiotic.

The antibiotic kills some of the bacteria, the resistant bacterium survives and reproduces.

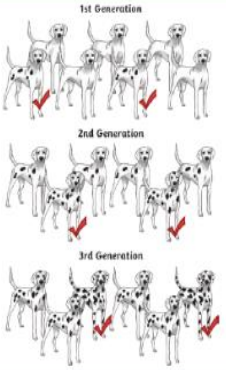
The antibiotic kills the rest of the non-resistant bacteria so the person may start to feel a little better. The resistant bacterium has survived the antibiotic and continues to multiply.

To reduce the rate at which antibiotic-resistant strains appear:

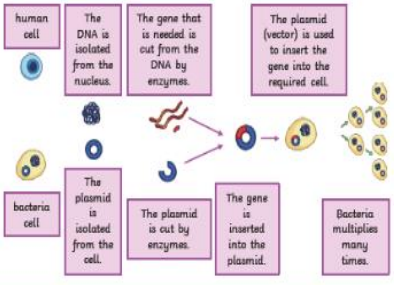
- Antibiotics should only be used when they are really needed, not for treating non-serious or viral infections.
- Patients should complete their courses of antibiotics, even if they start to feel better.
- The agricultural use of antibiotics should be restricted.

Selective Breeding

1. Choose parents who have the desired characteristic.
2. Select the best offspring and breed these to make the next generation.
3. These offspring are then bred again and again, over many generations, until a desired result is achieved.



Genetic Engineering



Classification

Linnaeus classified living things into kingdom, phylum, class, order, family, genus and species.

Organisms are named by the binomial system of genus and species.

Due to evidence from chemical analysis, there is now a 'three-domain system' developed by Carl Woese.

Domain	bacteria	archaea	eukaryota			
Kingdom	eubacteria	archaebacteria	protista	fungi	plantae	animalia

PARENT/CARER QUIZZES

Ask your parent or carer to quiz you on some of the knowledge from ***Maths*** and ***Science.*** Record your scores below and see if you improve each time.

Date	Subject	Score /10	Did you improve from last time?

MFL

Grade 7-9 Spanish WOW phrases

Spice up your 150 word and your speaking.

Go through this booklet and pick out between 3-5 phrases in each section that you are going to use in your 150-word piece of writing no matter what the bullets are asking you. Learn them off by heart. In your writing examination write them down when you are planning to make sure you include them in your answers.

Opinion phrases.

me chifla/me mola – I like
me parece que – It seems that
a mi modo de ver – from my point of view
desde mi punto de vista – from my point of view.
según mi madre – according to my mum
diría que – I would say that
es importante decir que – it's important to say that
debo admitir que – I have to admit that
que vale la pena – it is worth it
ser un sueño hecho realidad – a dream come true
tengo la impresión de – I get the impression
habría creído – I would have believed
para mi parte – as for me
lo que me molesta – what annoys me
lo que me preocupa – what worries me

A range of adjectives.

irritante – irritating
decepcionante – disappointing (not deceptive)
emotivo/a – moving (emotional)
exitoso/a – successful
original – original
confundido/a – confused
flipante - owesome
enfadado/a – angry
delicioso/a – delicious
agotado/a – exhausted
ridículo/a – ridiculous
inolvidable – unforgettable
encantado/a - delighted

A range of grammatical structures.

- Tener structures.

tener suerte – to be lucky (Ian tiene suerte porque va a Barcelona)
tener éxito – to be successful (Tengo éxito porque…)
tener miedo de – to be scared of (Tengo miedo de viajar en avion)
tener prisa – to be in a hurry (siempre tengo prisa por la mañana)

- Sin + infinitive (without)

sin perder un momento (without wasting a moment)
es mejor vivir sin fumar (it's better to live without smoking)
sin aprender los verbos irregulares el español resultará más dificil (without learning irregular verbs, Spanish would be more difficult)

- Antes de (before)

antes de coger el avion – before catching the plane.

MFL

antes de volver a casa – before going home

- Al + infinitive (on doing something)

al llegar al colegio, voy al club de tenis – on arriving at school I go to tennis club.
al volver a casa siempre meriendo algo – on arriving home, I always have a snack.

- Después de (after doing something)

después de hacer mis deberes – after doing my homework.
después de charlar con mis amigos – after chatting to my friend.

- A pesar de – in spite of doing something

a pesar de hacer mis deberes, recibí un castigo ayer – despite doing my homework, I got a dention yesterday.
a pesar de trabajar bien en matemáticas, siempre saco malas notas – in spite of working hard in maths, I always get bad grades.

- Acabar de + infinitive (to have just done something)

acabo de hacer mis deberes – I have just done my homework.
acabo de llegar de Barcelona – I have just arrived from Barcelona.
acaban de ganar cinco partidos – they have just won 5 matches.

- Estar a punto de – to be about to do something

estoy a punto de ir al cine con mis amigos ¡Qué guay! – I'm about to go to the cinema with my friends – how cool.
estaban en punto de salir cuando llegaron sus abuelos – they were just about to leave when their grandparents arrived.

- Desde hace/hace + time

estudio el Español desde hace 5 años – I have been studying Spanish for 5 years.
hace 5 años, fui a España por la primera vez – 5 years ago I went to Spain for the first time.

Use idiomatic expressions.

- Aburrirse como una ostra – to be bored to death
- Estar más perdido que un pulpo en un garaje – to not have a clue.
- Un pulpo en un garaje – a fish out of water.
- Ser la leche – to be amazing/the greatest
- Cuesta una oja de la cara – to cost an arm and a leg
- Tomar el pelo – to pull one's leg (me estás tomando el pelo – you're pulling my leg)
- Ser pan comido – to be a piece of cake.
- Estar como una cabra – to be a bit barmy
- No tener pelos en la lengua – to be straight-talking/direct (mi amigo no tienes pelos en la lengua – my friends tells it how it is)
- Tirar la casa por la ventana – to spare no expense. ("*Tiré la casa por la ventana cuando compré mi nuevo coche.*" (I spared no expense when I bought my new car.)
- Estar hecho un ají – to be hopping mad
- Estar más sano que una pera – to be as fit a fiddle.
- Ser uña y carne – to be bosom buddies.
- Tener un humor de peros – to be in a bad mood

Extending your sentences (fancy connectives)

- que – who/which/that (mi madre que se llama Sheila)
- lo que – use at the beginning of a sentence to express an opinion (lo que me molesta)
- cuando – when
- mientras – while
- por ejemplo – for example
- por un lado… por otro lado – on one hand… on the other hand.
- de hecho – in fact
- sin embargo/no obstante – nevertheless
- aparte de – besides
- no solo…sino también – not only…but also
- como – as
- solo el tiempo dirá – only time will tell
- no cabe duda de que – there is no doubt that

- Tener más lana que un Borrego – to be loaded/rolling in money
- Estar sin blanca – to be skint

The Subjunctive

- cuando tenga dieciocho años – when I'm 18
- si tuviera bastante dinero – if I had enough money
- ojalá ganemos la lotería – I hope we win the lottery
- ojalá haga buen tiempo mañana – I hope its nice weather tomorrow.
- quiero que me madre sea – I hope my mum will be
- espero que tenga buenas notas – I hope I get good grades
- sea como sea – no matter how/at any cost
- cuando sea – whenever
- aunque sea poco – although it's not a lot
- aunque sea pequeño – although it's small
- ojalá sea pronto – I hope it will be soon.
- ojalá que salga bien – I hope it turns out well.
- cuando sea necesario – when it is necessary
- quiero que sepas – I want you to know.

Introducing ideas

- trata de – this is about/ to do with
- con respecto a – as for
- para colmo – to cap it all
- dado que/puesto que – given that
- considerando que/dado que – considering that
- en vista de/visto que – in view of
- me parece que– it seems to me that
- sin duda – without doubt
- gracias a – thanks to
- a causa de – because of

- de hecho – indeed, in fact
- en primer lugar – First of all

MFL

SPANISH GCSE ESSENTIALS (HIGHER)

OPINION STARTERS	
en mi opinión	a mi modo de ver
debo admitir que	*mi padre* opina que

SEQUENCERS
primero
para empezar
luego
despues
mas tarde
finalmente

CONDITIONALS	
si tuviera el dinero	+ CONDITIONAL
si fuera rico	
si tuviera la opción	
si pudiera	

JOINING	OPPOSING
y por eso	por otro lado
igualmente	al contrario
sin duda	en contraste
por ejemplo	sino que
de manera que	aún si

SUBJUNCTIVES	
quiero que haga	I want him to do
para que tenga	so that I have
cuando sea mayor	when I am older
a menos que pueda	unless I can
espero que haya	I hope that there are

	IMPERFECT I used to play	CONDITIONAL I would play	PERFECT/ PLUPERFECT I have/had played
jugar	jugaba	jugaría	he/había jugado
ser	era	sería	he/había sido
haber	había	habría	he/había habido
estar	estaba	estaría	he/había estado
tener	tenía	tendría	he/había tenido
hacer	hacía	haría	he/había hecho
ir	iba	iría	he/había ido
comer	comía	comería	he/había comido
llamarse	me llamaba	me llamaría	me he/había llamado

INFINITIVE EXPRESSIONS		
espero	I hope to	+INFINITIVE
suelo	I usually	
tengo ganas de	I want to	
voy a poder / podré	I will be able to	
estoy a punto de	I am about to	
acabo de	I have just	
tengo la intención de	I intend to	
en lugar de	instead of	
después de	after	
antes de	before	
es mejor	it is better to	
no se permite	it is forbidden to	

-ING		
estar + -ar = -ando -er = -iendo -er = -iendo	estoy hablando	I am talking
	estaba hablando	I was talking
	estaré hablando	I will be talking

RELATIVE CLAUSES		
que + verb	that, which, who	el libro que lee es mío
lo que	what (an abstract idea)	lo que no me gusta

COMPARATIVES			SUPERLATIVES		
más	ADJECTIVE	que	el la los las	más	ADJECTIVE
menos		que		menos	
tan		como			

ADJECTIVES	
POSTITIVE	NEGATIVE
increíble	desagradable
maravilloso/a	estresante
entretenido/a	decepcionante
emocionante	raro/a
impresionante	ridículo/a
generoso/a	perezoso/a
afortunado/a	furiosos/a
divertido/a	doloroso/a
precioso/a	loco/a

SPANISH GCSE ESSENTIALS (HIGHER)

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OPINION STARTERS	
en mi opinión	

SEQUENCERS

CONDITIONALS	
si tuviera el dinero	+ CONDITIONAL
si fuera rico	
si tuviera la opción	
si pudiera	

JOINING	OPPOSING
por ejemplo	por otro lado
de manera que	aún si

SUBJUNCTIVES	
quiero que haga	
para que tenga	
cuando sea mayor	
a menos que pueda	
espero que haya	

	IMPERFECT I used to play	CONDITIONAL I would play	PERFECT/ PLUPERFECT I have/had played
ser			
ir			
estar			
tener			

INFINITIVE EXPRESSIONS		
espero		+INFINITIVE
suelo		
tengo ganas de		
voy a poder / podré		
estoy a punto de		
acabo de		
tengo la intención de		
en lugar de		
después de		
antes de		
es mejor		
no se permite		

-ING		
estar + -ar = -ando -er = -iendo -er = -iendo		I am talking
		I was talking
		I will be talking

RELATIVE CLAUSES		
que + verb	that, which, who	el libro que lee es mío
lo que	what (an abstract idea)	lo que no me gusta

COMPARATIVES			SUPERLATIVES		
más	ADJECTIVE	que	el la los las	más	ADJECTIVE
menos		que		menos	
tan		como			

ADJECTIVES	
POSTITIVE	NEGATIVE

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SPANISH GCSE ESSENTIALS (FOUNDATION)

OPINIONS	
me encanta(n)	+ INFINITIVE OR + NOUN
me gusta(n)	
no me gusta(n)	
odio	
prefiero	

USEFUL EXPRESSIONS		
PRESENT	PAST	FUTURE
es	era	será
hace	hacía	hará
hay	había	habrá

INFINITIVE EXPRESSIONS	
tengo que - I have to	+ INFINITIVE
puedo - I can	
quiero - I want to	
voy a - I will	
me gustaría - I would like to	
se debe - you must	
se puede - you can	
hay que - you have to	

NEGATIVES		
no	VERB	- not
no		nunca - not ever
no		nadie - not anybody

	PRESENT I play I am playing	PRETERITE I played	FUTURE I will play
jugar	juego	jugué	jugaré
ser	soy	fui	seré
haber	he	hube	habré
estar	estoy	estuve	estaré
tener	tengo	tuve	tendré
hacer	hago	hice	haré
ir	voy	fui	iré
comer	como	comí	comeré
ver	veo	vi	veré

TIME MARKERS		
PRESENT	PAST	FUTURE
hoy	ayer	mañana
de momento	en el pasado	en el futuro
esta noche	anoche	mañana por la noche
este verano	el verano pasado	el próximo verano
el lunes	el lunes pasado	el lunes que viene
ahora	anteayer	pasado mañana

VERB ENDINGS	-AR	-ER	-IR	IR to go	HABER to have	ESTAR to be
yo	-o	-o	-o	voy	he	estoy
él/ella	-a	-e	-e	va	ha	está
ellos/ellas	-an	-en	-en	van	han	están

INTENSIFIERS
mucho - a lot
muy - very
tan - so
demasiado - too much
bastante - quite
un poco - a little

FREQUENCY
todos los días
a menudo
a veces
algunas veces
de vez en cuando
raramente

JOINING IDEAS
y - and
además - also
así que - therefore
porque- because
por lo tanto- therefore

OPPOSING IDEAS
pero - but
sin embargo - however
mientras - whereas
no obstante - however
aunque - although

OPINION STARTERS	
para mí	creo que
me parece que	pienso que

ADJECTIVES			
POSTITIVE		NEGATIVE	
barato/a	agradable	aburrido/a	terrible
fácil	bonito/a	fatal	feo/a
útil	tonto/a	difícil	inútil
genial	relajante	egoísta	malo/a
amable	fascinante	caro/a	duro

SPANISH GCSE ESSENTIALS (FOUNDATION)

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OPINIONS	
	+ INFINITIVE OR + NOUN

USEFUL EXPRESSIONS		
PRESENT	PAST	FUTURE
es		
hace		
hay		

INFINITIVE EXPRESSIONS	
I can	+ INFINITIVE
I want to	
You can	
You must	

NEGATIVES		
no	VERB	
no		
no		

	PRESENT I play I am playing	PRETERITE I played	FUTURE I will play
ser			
estar			
ir			
tener			
haber			
hacer			

TIME MARKERS		
PRESENT	PAST	FUTURE
hoy	ayer	mañana
de momento		
esta noche		
este verano		
el lunes		
ahora		

VERB ENDINGS	-AR	-ER	-IR	IR to go	HABER to have	ESTAR to be
yo						
él/ella						
ellos/ellas						

INTENSIFIERS
mucho

FREQUENCY
todos los días

JOINING IDEAS
y - and

OPPOSING IDEAS
pero - but

OPINION STARTERS	
para mí	

ADJECTIVES			
POSTITIVE		NEGATIVE	

Spanish Writing Mat (F)

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Time markers

present	past	future
hoy – today	ayer – yesterday	mañana – tomorrow
de momento – at the moment	en el pasado – in the past	en el futuro – in the future
esta noche – tonight	anoche – last night	mañana por la noche- tomorrow night
este verano – this summer	el verano pasado – last summer	el próximo verano – next summer
ahora – now	anteayer – the day before yesterday	pasado mañana – the day after tomorrow

Adjectives

Positive				Negative			
barato/a	cheap	agradable	pleasant	aburrido/a	boring	terrible	terrible
fácil	easy	bonito/a	pretty	fatal	awful	feo/a	ugly
útil	useful	genial	great	difícil	hard	inútil	useless
relajante	relaxing	amable	nice	egoísta	selfish	malo/a	bad
facinante	fascinating	divertido/a	fun	caro/a	expensive	duro/a	hard

JOINING IDEAS
y - and
además - also
así que - therefore
porque- because
por lo tanto- therefore

OPPOSING IDEAS
pero – but
sin embargo - however
mientras - whereas
no obstante – however
aunque - although

Negatives		
no	VERB	- not
no		nunca – not ever
no		nadie – not anybody

INFINITIVE EXPRESSIONS	
tengo que – I have to	+ INFINITIVE
puedo – I can	
quiero – I want to	
voy a – I will	
me gustaría – I would like to	
se debe – you must	
se puede – you can	
hay que – you have to	

OPINION STARTERS	
para mí	creo que
me parece que	pienso que

Opinions

me encanta(n)	+ infinitive or + noun
me gusta(n)	
no me gusta(n)	
odio	
prefiero	

justifying opinions	
porque	because
es	it is
era	it was
será	it will be

INTENSIFIERS
mucho – a lot
muy - very
tan - so
demasiado – too much
bastante - quite
un poco – a little

FREQUENCY
todos los días
a menudo
a veces
algunas veces
de vez en cuando
raramente

VERB ENDINGS	-AR	-ER	-IR	IR to go	HABER to have	ESTAR to be
yo	-o	-o	-o	voy	he	estoy
él/ella	-a	-e	-e	va	ha	está
ellos/ellas	-an	-en	-en	van	han	están

MFL

Week 1: Verbs

Spanish	First guess	Checked in a dictionary	After learning	Reviewed
acabar de	To have just			
bastar	To be enough			
comenzar	To start			
continuar	To continue			
dar	To give			
darse cuenta de	To realise			
deber	must			
decidir	To decide			
dejar de	To stop (doing something)			
Echar Echar de menos	To remove To miss someone			
empezar	To start			
embarazarse	To get pregnant			
hace(n) falta	To need			
durar	To last			
emboracharse	To get drunk			
hay	There is /there are			
hay que	You must			
escoger	To pick			
elegir	To chose			
coger	To catch			

Self-test score:..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

Week 2: More verbs

Spanish	First guess	Checked in a dictionary	After learning	Reviewed
medir	To measure			
mentir	To lie			
necesitar	To need			
ocurrir	To happen			
pasar	To spend (time)			
pesar	To weigh			
poder	To be able to			
poner	To put			
gastar	To spend (money			
querer	To want			
Ganar	To earn			
saber	To know			
seguir	To follow			
aprobar	To pass			
suspender	To fail			
confiar	To trust			
tener lugar	To take place			
tener que	To have to			
Tener ganas de	To look forward to / to fancy			
casarse	To get married			

Self-test score:..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

MFL

Week 3: Verbs of opinion

Spanish	First guess	Checked in a dictionary	After learning	Reviewed
aburrirse	To ger bored			
Aguantar	To stand (something)			
alegrar	To be happy			
alegrarse (de)	To be pleased			
apreciar	To appreciate			
aprovechar	To take advantage of			
aprovecharse (de)	Yo take advantege of someone			
creer	To belive			
dar igual	I am not bothered			
decepcionar	To			
decir	To say			
molestar	To bother			
detestar	To hate			
disfrutar	To enjoy			
divertirse	To rnjoy yourself			
dudar	To doubt			
encantar	To love			
encontrar (+*adj.*) que	To find			
esperar	To wait/hope			
estar de acuerdo	To agree			

Self-test score:..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

Week 4: More verbs of opinion

Spanish	First guess	Checked in a dictionary	After learning	Reviewed
estar a favor de	To be in favour of			
estar en contra de	To be against			
estar equivocado	To be wrong			
estar harto de	To be fed up of			
fastidiar	To bother/wind up			
Soportar	To stand (something)			
interesar(se)	To be intereseted in			
odiar	To hate			
opinar	To have the opinion that			
parecer	To seem			
pasarlo bien/mal	To have a good/bad time			
pensar	To think			
ponerse de acuerdo	To agree with			
preferir	To prefer			
quedar	To stay			
querer decir	To want to say			
reconocer	To recognise			
sentir(se)	To feel			
tener razón	To be right			
valer la pena	To be worthwhile			

Self-test score:..... /20

Teacher test score: ..... /20

Re-test score: ..... /20

MFL

Spanish	First guess	Checked in a dictionary	After learning	Reviewed
aburrido	boring			
afortunado	fortunate			
agradable	pleasant			
antiguo	old			
barato	cheap			
bonito	pretty			
caro	expensive			
decepcionante	dissapointing			
desagradable	unpleasant			
divertido	fun			
duro	hard			
emocionante	exciting			
encantador	charming			
entretenido	entertaining			
espléndido	splendid			
estupendo	great			
fácil	easy			
fatal	awful			
fenomenal	fantastic			
feo	ugly			

Self-test score: ...../20

Teacher test score: ...../20

Re-test score: ...../20

Knowledge organiser: the origins of the Cold War, 1941–1958

Key individuals:

Presidents of the United States of America (USA)

Capitalists

Western bloc.

Franklin D. Roosevelt (1933–1945)

President during the Grand Alliance. Wanted to work with the USSR to at the Tehran and Yalta Conferences.

Harry Truman (1945–1953)

President during the freezing of relations with USSR. Famous for dropping the first A-Bomb, the Truman Doctrine, Marshall Plan and Berlin Airlift.
Sought to contain communism.

Dwight Eisenhower (1953–1961)

President during the Hungarian Uprising, and escalated the arms race by authorising USH-Bomb (1952) and ICBM tests (1957).

Leaders of the Union of Soviet Socialist Republics (USSR)

Communists

Eastern bloc.

Josef Stalin (1929–1953)

Became unchallenged leader of the USSR in 1929. Joined the Grand Alliance after the Nazis invaded the USSR in 1941.
Stalin was a ruthless dictator, who wanted to prevent the USSR being invaded again. He built a buffer-zone in Eastern Europe as he felt that the capitalist powers would eventually invade again. He sought to build up the USSR's strength for a future war and spread communism. An example of this is the Berlin Blockade in 1948.

Nikita Khrushchev (1953–1965)

Famous for a policy of peaceful-coexistence with the USA. He created the Warsaw Pact (1955) and ordered the invasion of Hungary (1956).

Timeline:

November 1943: Tehran Conference

August 1945: A-Bomb

5 March 1946: Churchill's 'Iron Curtain' speech

January 1947: Communist takeover of Poland

5 June 1947: Marshall Plan announced

February 1948: Communist takeover of Czechoslovakia

January 1949: Comecon set up

7 October 1949: Formation of German Democratic Republic

14 May 1955: Warsaw Pact formed

July 1945: Potsdam Conference

February 1945: Yalta Conference

27 September 1946: Novikov telegram

22 February 1946: Kennan's 'long' telegram

7 October 1949: Cominform set up

12 March 1949: Truman Doctrine

24 June 1948–12 May 1949: Berlin Blockade

25 May 1949: Formation of Federal Republic of Germany

4 April 1949: NATO set up

23 June–11 November 1956: Hungarian Uprising

Glossary of key terms:

A-bomb: the atom bomb was the first nuclear weapon. Two were dropped on Japan in August 1945. The USSR raced to develop its own A-bomb, which was done in 1949.	**Ideology:** a set of shared beliefs. In 1941, the USA and USSR had different ideologies about how a country should be governed.
Arms race: a race to have more bigger, powerful weapons than another country.	**Iron Curtain speech:** a speech given by former Prime Minister, Winston Churchill, on 5 March 1946. He made it plain that he thought the USSR was a threat to freedom and world peace.
Berlin Crisis, 1948: disagreements over the running of the German and Berlin zones of occupation led to the Berlin Blockade and Berlin Airlift. It ended when the USSR backed down and lifted the blockade.	**Marshall Plan:** also known as the European Recovery Program (ERP), offered economic aid to the countries of western Europe to help them rebuild and to prevent them becoming communist.
Capitalism: the belief that everyone should be free to own property and businesses to make money.	**Military Alliances:** armed groups of countries that support each other if attacked. The USA led NATO and the USSR led the Warsaw Pact.
Comecon: its full name was the Council for Mutual Economic Assistance. It was the USSR's version of the Mar- shall Plan in the Eastern bloc.	**Potsdam Conference:** the final conference between the Grand Alliance to solve the problems of WW2. It met in Potsdam in Germany.
Cominform: its full name was the Communist Information Bureau. It was set up by Stalin to allow him to control the governments of the satellite states.	**Satellite state:** a nation that was once independent but is now under the control of another.
Communism: the belief that all property should belong to the state and that everyone gets a fair share of the wealth.	**Superpowers:** the name given to a state that is stronger, either militarily or economically than all others. The USA and USSR were superpowers.
Containment: limiting the spread of something. During the Cold War, the USA wanted to contain communism.	**Tehran Conference:** the first meeting of all leaders of the Grand Alliance, in Iran. The meeting discussed how to win WWII and what to do after the war.
Dollar Imperialism: Stalin used this phrase in his criticism of the Marshall Plan. He argued that the USA wanted to divide Europe in two and establish American economic control over western Europe.	**Telegrams:** a written message sent by telegraph. The predecessor of an email. Famous telegrams include Kennan's 'long' telegram and the Novikov telegram.
FRG: short for the Federal Republic of Germany. This was the full name of West Germany. The FRG was a democracy and capitalist. It joined NATO.	**Truman Doctrine:** a speech by Truman on 12 March 1947, in which he offered support to Greece and Turkey and said the USA would contain communism.
GDR: short for the German Democratic Republic. This was the full name of East Germany. The GDR was a communist state. It joined the Warsaw Pact.	**United Nations:** a world organisation designed to stop war. The USSR, USA, France, UK and China had the right to 'veto' (stop) resolutions.
Grand Alliance: the name given to the UK, USA and USSR when they united to defeat Nazi Germany in WWII.	**USA:** United States of America (also shortened to United States). 50 states ruled from Washington D.C.
H-bomb: the hydrogen bomb was the next generation of atomic weapon after the A-bomb. The USA got theirs in 1952 and the USSR in 1953.	**USSR:** Union of Soviet Socialist Republics (also shortened to Soviet Union). Fifteen republics ruled from Moscow, the capital of Russia.
Hungarian Uprising: an attempt by the people of Hungary to break free from Soviet communism. The USSR invaded when the Hungarian leader, Nagy said Hungary would leave the Warsaw Pact. The USSR reimposed a Soviet communist government in Hungary.	**Yalta Conference:** a meeting of the Grand Alliance at Yalta in the USSR. It made the agreements at Tehran more concrete including the division of Germany and the creation of the United Nations.
ICBM: short for Inter-continental ballistic missile. Essentially a rocket, that a nuclear bomb can be attached to and fired at an enemy.	**Zone:** an area of land. After WWII Germany and Austria were divided in to four zones occupied by the USA, USSR, UK and France.

History

Knowledge organiser: Cold War crises, 1958—1970

Key individuals:

Presidents of the United States of America (USA)

Capitalists

Western bloc.

Dwight Eisenhower (1953—1961)

President during the Berlin crises 1958—1960, and famously broke off relations with Cuba in 1961.

John F. Kennedy (1961—1963)

President during the Berlin crisis that led to the Berlin Wall being built. He also had to deal with the Cuban Missile Crisis. Assassinated in 1963.

Lyndon B. Johnson (1963—1969)

President during the Prague Spring, and the Soviet invasion of Czechoslovakia.

PJB 2020

Leaders of the Union of Soviet Socialist Republics (USSR)

Communists

Eastern bloc.

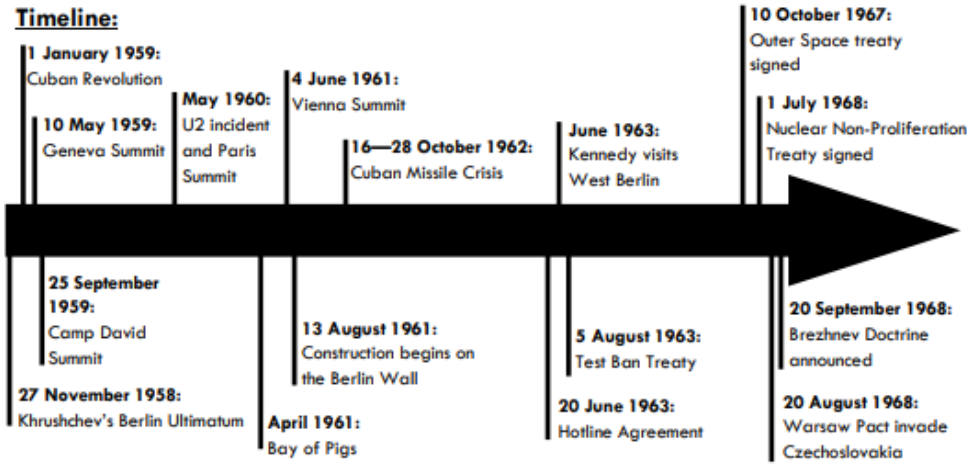
Nikita Khrushchev (1953—1965)

Leader of the USSR. He had violently put down the Hungarian Uprising in 1956. Khrushchev followed a policy of peaceful co-existence with the west. Khrushchev wanted allies out of West Berlin and precipitated a series of crises to force them out. When this failed he asked the GDR to build the Berlin Wall. He also backed Fidel Castro in Cuba leading to the Cuban Missile Crisis. He was removed from power by a group led by Brezhnev who thought he had failed as a leader.

Leonid Brezhnev (1965—1982)

As leader of the USSR he wanted to secure communism. He ordered the invasion of Czechoslovakia in 1968.

Timeline:



Glossary of key terms:

Bay of Pigs: the location of a failed US-sponsored attack on Cuba to overthrow Castro, April 1961. Around 1,400 Cuban exiles armed with US weapons attached. It was a failure and humiliated Kennedy and the USA.	**No man's land:** land which is unoccupied or under dispute between two countries. The gap between the land between the Berlin Wall was called no man's land, although technically it was part of East Germany.
Berlin Ultimatum: in November 1958, Khrushchev demanded that Berlin should be demilitarised and Western troops withdrawn so it could become a free city. He withdrew it in 1959, but renewed it in 1961.	**Nuclear Non-Proliferation Treaty, 1968:** a treaty signed by the USA, USSR, France, UK and other countries that did not have nuclear weapons. The treaty forbade the sharing of nuclear technology.
Berlin Wall: a concrete and barbed wire wall that encircled West Berlin to prevent East Germans escaping to the west. The communists called it the 'Anti-Fascist Prevention barrier' and claimed it was to prevent the capitalist countries destroying socialism.	**Non-proliferation:** stopping the spread of something, usually weapons or armaments.
Brezhnev Doctrine: a belief announced by Brezhnev after the invasion of Czechoslovakia. It stated that the USSR and its allies had the right to invade another communist country if communism was threatened.	**Outer space treaty, 1967:** in this agreement the USA and USSR agreed to not use space for military purposes. The treaty specifically ruled out putting nuclear weapons into orbit.
Brinkmanship: pushing events as close to war/conflict as possible, with the aim of achieving an advantageous outcome.	**Paris, 1960:** a summit that failed due to the U2 incident. Eisenhower refused to apologise, and Khrushchev left.
Camp David, 1959: Khrushchev was the first Soviet leader to visit the USA. He met Eisenhower for the first time at the Presidential retreat at Camp David. It led to better relations between the superpowers and led to the withdrawal of the Berlin ultimatum.	**Prague Spring:** the period in Czechoslovak history when Dubček's ideas of reforming socialism were implemented (April—August 1968). It ended with the Warsaw Pact invasion.
Cuban Missile Crisis, 1962: the closest the world has ever come to nuclear war. Soviet missiles were found on Cuba and the USA demanded they were withdrawn. After much brinkmanship, the USSR agreed to the removal of the missiles.	**Refugee:** a person who has been forced to leave their country.
Cuban Revolution, 1959: Fidel Castro and Che Guevara led a revolution that overthrew the US sponsored dictator, Batista. This created tension between the USA and Cuba.	**Socialism with a human face:** the idea of Dubček, which envisioned the reform of communism to allow more people to have greater freedoms.
Free-city: a city with its own independent government.	**Test BAN, 1963:** a consequence of the Cuban Missile Crisis. In August 1963 the USA, USSR, and UK agreed to not test nuclear weapons in space, underwater or in the atmosphere.
Geneva, 1959: a summit between the foreign ministers, where they tried to sort out the issue of how Berlin would be governed. No agreement was made.	**The Thirteen Days:** another name for the peak of the Cuban Missile Crisis. Between 16—28 October 1962.
Hotline: a direct telephone line between the Whitehouse and the Kremlin. It allowed the leaders of USA and USSR to talk to each other quickly to avoid another event like the Cuban Missile Crisis.	**U2 Crisis, 1960:** On 1 May an American U2 spy plane was shot down over the USSR. The USSR demanded an apology, but the USA refused.
Ich bin ein Berliner: Kennedy made this speech to the people of West Berlin in June 1963. An urban legend is that he said 'I am a jam doughnut', but this is a misconception. You can say 'Ich bin Berliner' or 'Ich bin ein Berliner'.	**Ultimatum:** a final demand, often backed up with a threat to take action.
Kennedy's visit to West Berlin, 1963: Kennedy made the visit to West Berlin to raise morale after the building of the Berlin Wall. It demonstrated US commitment to West Berlin.	**Vienna, 1961:** a summit where Kennedy and Khrushchev met for the first time. Khrushchev thought he could bully Kennedy. He failed and it led to a strain in US-Soviet relations.
Nationalise: when a business is taken over by the government.	**Warsaw Pact:** the Eastern bloc's military alliance. They invaded Czechoslovakia together in 1968.

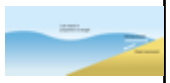
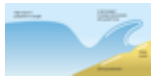
Geography

GCSE Physical landscapes in the UK – Coasts Knowledge Organiser

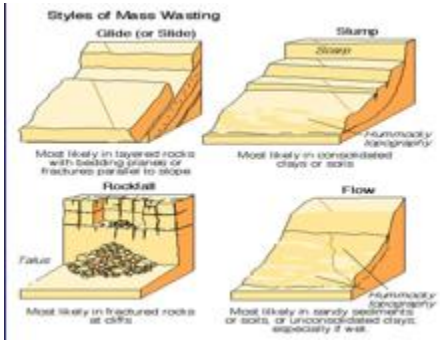
KI : The UK has a range of diverse landscapes

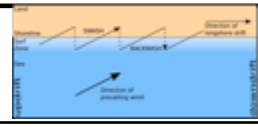
Key terms	Definitions
Chemical weathering	The decomposition of rock by a chemical change within the rock
Deposition	Occurs when material transported by the sea is dropped due to the sea losing energy
Erosion	The wearing away and removal of material by a moving force
Longshore drift	Zig zag movement of sediment along the shore caused by swash and backwash
Mass movement	The downhill movement of weathered material under the force of gravity
Mechanical weathering	Weathering process that causes physical disintegration of rock without any change in the chemical composition of the rock
Sliding	Loose material becomes saturated and flows downhill
Slumping	A whole segment of the cliff moves down slope along a saturated shear-plane or line of weakness
Transportation	The movement of eroded material
Waves	Ripples in the sea caused by the transfer of energy from the wind blowing over the surface of the sea

KI : The coast is shaped by a number of physical processes

Constructive waves	Destructive waves
Powerful swash Weaker backwash Long wave length Low wave height Gentle beach 	Weak swash Strong backwash Short wave length Higher wave height Steep beach 
Types of weathering	
Mechanical weathering	Disintegration / break up of rock e.g. freeze thaw
Chemical weathering	Caused by chemical changes e.g. carbonation, oxidation

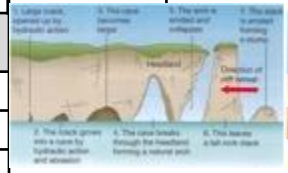
Mass movement	Downward movement of material under the influence of gravity
Sliding	Blocks of rock slide downhill
Slumping	Rotational slip of saturated soil and weak rock
Rock falls	Fragments of rock break away from the cliff face

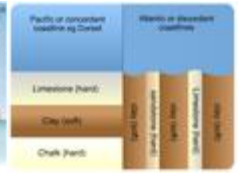


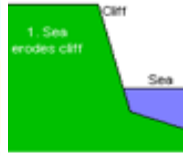
Key terms	Definitions
Abrasion	The wearing away of cliffs by sediment flung by breaking waves
Attrition	Erosion caused when rocks and boulders transported by waves bump into each other and break up into smaller pieces
Hydraulic power	Waves breaking compress air in cracks in a cliff
Transportation : Longshore Drift Swash – the movement of material up the beach Backwash – the movement of material back down the beach	
Deposition – the dropping of material	• Where flow of water slows e.g. sheltered bays • Where there are large flat beaches • Where there are engineered structures e.g. groynes

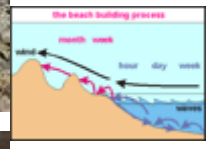
KI : Distinctive coastal landforms are the result of rock type, structure and physical processes

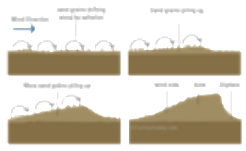
Key terms	Definitions
Arch	A wave eroded passage through a headland
Bar	When a spit grows across a bay to create a lagoon
Beach	The zone of deposited material that extends from the low water line to the limit of storm waves
Cave	Large hole in the cliff caused by waves forcing their way into cracks in the cliff
Cliff	A steep high rock face formed by weathering and erosion along the coastline
Headlands and bays	Headlands are promontories of resistant rock and bays lie in between where these have been eroded back
Sand dunes	Coastal sand hill above the high tide mark
Spit	A finger of sediment extending from the shore caused by deposition
Stack	An isolated pillar of rock left when an arch has collapsed
Wave cut platform	A rocky level shelf representing the base of retreated cliffs

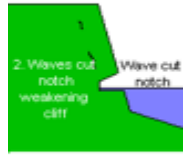


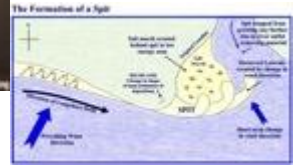












Concordant coastline - Dorset	Discordant Coastline - Dorset
Durdle Door (arch) Lulworth Cove Kimmeridge (Wave Cut Platforms) Seacombe (cliffs)	Durlston Head (Headland) Swanage bay Old Harry (stack) Studland sand dunes Sandbanks (beach and spit)

KI : Different management strategies can be used to protect coastlines from the effects of physical processes

Soft engineering	Managing erosion by working with natural processes
Beach nourishment	The addition of new material to a beach artificially. Cheap (£500, 000 per 100 metres), easy to maintain, constant maintenance, sand from seabed destroys organisms
Beach reprofiling	Changing the profile or shape of the beach
Dune regeneration	Action taken to build up dunes and increase vegetation to strengthen the dunes and prevent excessive coastal retreat. Maintains natural environment, cheap, time consuming, areas off limit, limited area £200 – £2000 per 100 metres
Hard engineering	Use of concrete and large artificial structures to defend the coast
Gabion	Steel wire mesh filled with boulders. £50,000 pre 100 metres. Cheap, improves cliff management, unattractive, last 5 – 10 years
Groyne	Wooden barrier built out into the sea to stop longshore drift. £150,000 each, cheap, widen beach, unattractive, causes problems down the coast
Rock armour	Large boulders dumped on the beach as part of the coastal defences. £20,000 per 100 metres, quick to build, expensive to transport rock, rocks might not blend in
Sea wall	A concrete wall to reflect the energy of the sea and prevent erosion. £5000 - £10,000 a metre, effective barrier, promenade on top, expensive, high maintenance
Managed retreat	Allowing cliff erosion to occur as nature takes its course. Cheap, natural process, loss of land, relocation of people

Coastal Management Case Study: Lyme Regis in Dorset

Reasons for management	*Town has been built on unstable cliffs. Coastline is eroding more rapidly than any in Europe due to the powerful waves from the South West *Many properties have been destroyed or damaged *Considerable erosion of the foreshore *Sea walls have been breached many times
Management strategy	*Lyme Regis Environmental Improvement Scheme was set up in 90s *Long term coastal protection and reduce threat of landslips *Work completed in 2015 **Phase 1 (completed 1995):** - New sea wall east of Rver Lim; £1.4 million project to stabilise cliff **Phase 2 (Completed 2007):-** £22 million improvements – extensive sea wall and promenade, creation of wide sand and shingle beach, extension of rock armour at the Cobb **Phase 3 (not undertaken):-** Plan to prevent landslips to west of Cobb not undertaken as costs outweighed benefits **Phase 4 (completed 2015):** Focus on east of the town; £20 million and involved – constructing a new 390m sea wall, nailing, piling and draining to stabilise the cliff and protect 480 homes
Resulting effects and conflicts	✓ New beaches= increased visitor numbers=seafront businesses are thriving ✓New defences have stood up to recent storms ✓Harbour is now better protected, benefiting boat owners and fishermen ×increased visitor numbers – conflict with local people ×increased traffic and litter ×some people think new defences have spoilt the natural environment ×new sea wall may interfere with coastal processes – affecting neighbouring stretches of coastline ×stabilising cliff will prevent landslips that may reveal important fossils

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DUAL CODING

Based on some key knowledge from your ***History*** or ***Geography*** knowledge organisers, can you assign different parts of this knowledge to images to help you remember this in the future? Consider your images carefully.

Image	Key Knowledge

Image	Key Knowledge

One, two, three...Geography/ History

Write down 3 points or responses to each of these questions/ topics

Question/ Topic	1	2	3

Geog your memory/ Hi-story Lane

Use the LANES to recall key information about a particular topic, from ***History/ Geography,*** without looking at the sheets. Once you have added everything you can remember, look at these pages again and using a different colour pen, add in the knowledge that you missed out. This is the knowledge you should now continue to revise. Continue this process until you can remember everything on the page.

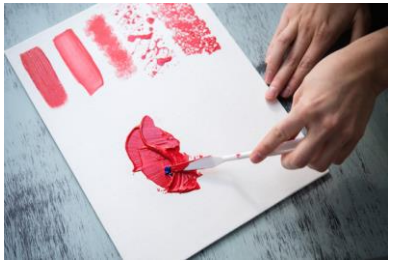
Acrylic Painting Techniques

WASH: You can treat acrylic like watercolour when you dilute the paint with enough water. You can use the watered-down paint to apply translucent washes on your surface. However, unlike watercolour, the acrylic paint will set permanently.

LAYERING: which can be combined with either of the two above methods, is simply to paint in layers. This means that you'll build the painting from the bottom up. You'll start by painting big blocks of colour, often as washes, and then adding more and more refinement as you add layers.

DETAILING: A small, fine brush can be used to apply details, such as the whites of eyes or the glisten on the wing of a bird.

SPLATTERING: Using a fairly wet brush, you can flick or splatter paint onto a work surface for an uneven splatter effect. It's fantastic for creating an abstract landscape or a starry night or for just adding texture to a piece.



PALETTE KNIFE: Applying paint with a palette knife is an instant way to make your painting "artsy." It might seem intimidating or advanced, but it's a technique accessible even to beginners. Simply use the palette knife to scrape up a bit of paint and apply it to your work surface. Pretend that you're artfully spreading buttercream on a cake or even butter on bread, and you'll get the idea pretty quickly.

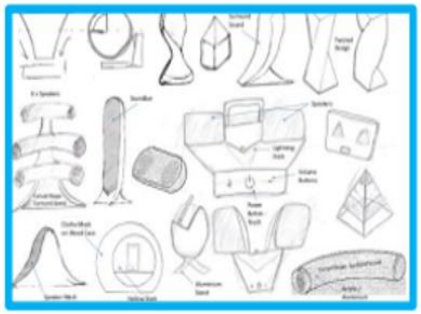
UNDERPAINTING: Start your painting by creating a "sketch" of the image in paint. Often this is done in a colour that contrasts with the palette you have in mind for the finished piece. You can paint over the underpainting entirely using opaque acrylic to cover any evidence of the paint below, or you can let parts of it shine through for a dimensional effect.

MIXING: Creating a family of colours or tones to work with in a painting can help you create subtle variances in your painting. Whether it's slight varieties of skin tones or varying shades of pink, having a family of tones pre-mixed before you paint can really help streamline the process.

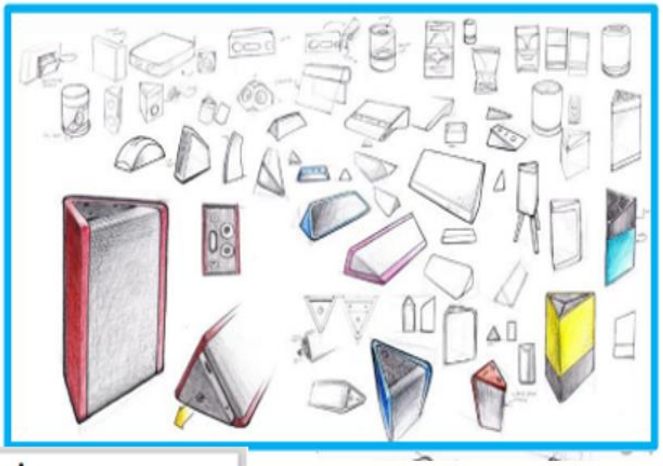
DABBING: Using a corner of a sponge or even a piece of paper towel, you can dab on accents of colour. Think of it like very artistic sponge painting. Dabbing adds a lot of texture and movement to a piece. For instance, on the painting above, dabbing with a sponge perfectly captured the texture and movement of trees swaying in a light breeze.

DT: Engineering

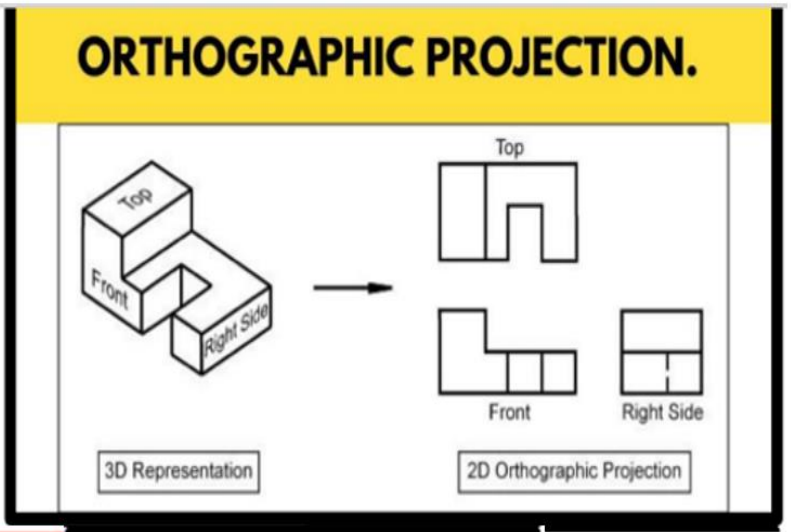
R107: OCR Engineering design
Designing and developing Ideas



Sketches



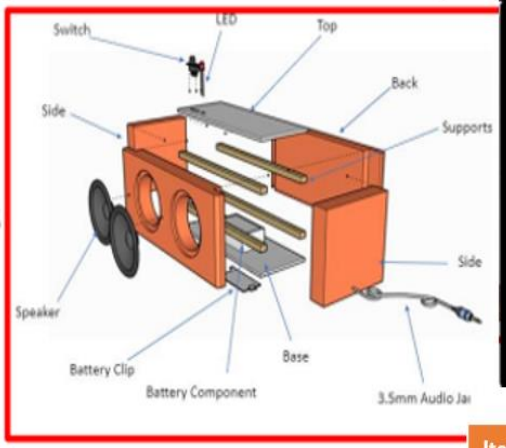
Development



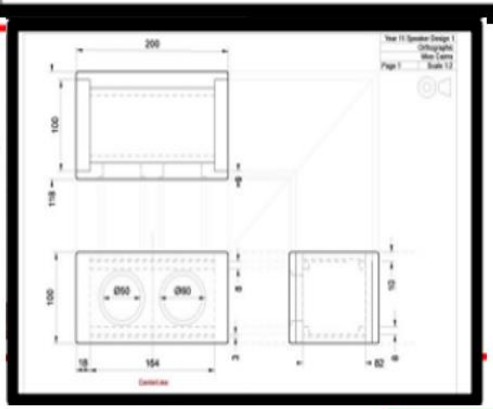
Analysis

Key Words:

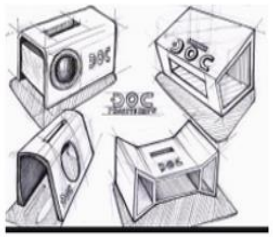
- Thumbnail sketch
- Initial idea
- Developed idea
- Working drawing
- Dimension
- CAD
- Standardised
- Component
- Oblique
- One Point Perspective
- Two point perspective
- Orographic Projection
- Freehand
- Thick and Thin lines
- Rendering
- Annotation
- Two Dimensions
- Three Dimensions
- Exploded View



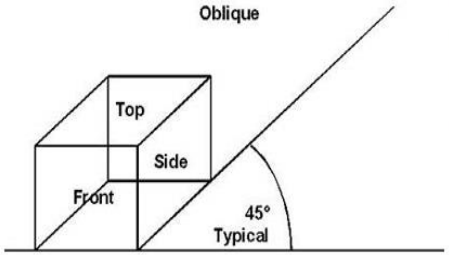
Exploded

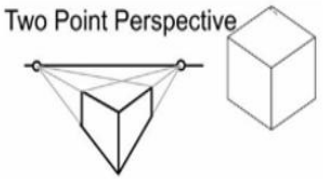


CAD working drawing

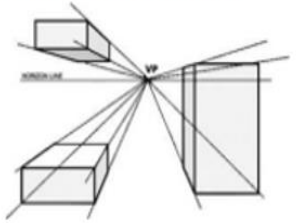


Isometric Drawing



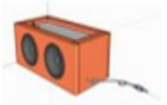


One Point Perspective

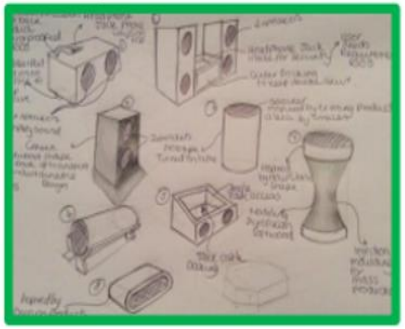


Item	Material
Speaker x2	Standard componer
Outer Casing	HIPS
Buttons	Polystyrene

Parts list



Surveys and Polls



Final Sketch annotation

R108: OCR Engineering design
Risk Assessment, Planning and Manufacture

Planning Steps/ Flow diagram
Manufacturing Specification
Risk assessment
Making Diary
Modelling, testing and Developing
Cutting list
Final Product- Range of manufacturing skill







Making Diary – each stage photographed
Which PPE?
What Material?
Which Method?

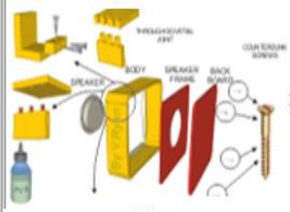
Standard components for use During manufacturing

Glue nails screws

speakers

Final Idea

Assembly and construction



Assembly process

Setting for laser Acrylic		
Colour line	Speed	Power
Black (cut)	6	100
Red (engrave)	400	21
Blue (mark)	200	21

Setting for laser MDF		
Colour line	Speed	Power
Black (cut)	4	100
Red (engrave)	400	21
Blue (mark)	200	21

Laser Cutter settings

Activity	Equipment			
Persons at Risk (highlighted)	Pupils	Employees/Staff	Visitors	Contractors
Step 1: Watch the demonstration and identify potential hazards				
Step 2: Decide who could be harmed and how				
Step 3: Evaluate the risks and decide on the control measures- add to if needed				
Step 4: record your findings and document what your actions will be				
Step 5: Review, Revise and update where necessary				
POTENTIAL HAZARDS	1. 2. 3			

Risk Assessment

Final Prototype

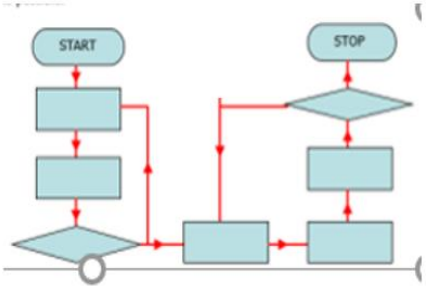
Manufacturing Flowchart

You need to use a flow chart to explain how to make your product. There are different specific symbols for each stage of the process.

TERMINATOR	DECISION	PROCESS	INPUT/OUTPUT
Start stop restart	Choice to be made	Instruction or action	Additions/removal to process

The symbols are locked together by arrows which indicate the correct sequence of events,. This makes the flowchart as clear as possible.

Always start with the correct symbol, show each stage in a rectangle using clear easy to follow instructions
You will need to add quality checks, which will require a decision to be made. Use feedback loops for any errors
Consider adding more processes if necessary



Cutting List

Rod Number Date Contract No: NSC/
Job Title:

Item Description (all dimensions in mm)

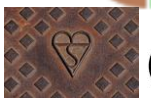
	Member	Material	No Off	Finished Sizes L	W	T	Total Length	Remarks incl cross Section of material
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

DT: Engineering

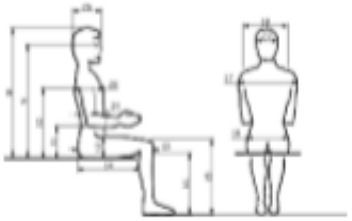
R105: OCR Engineering design Examination Subject Knowledge

Quality Control: a system of maintaining standards in manufactured products by testing and checking throughout the making stages

Identify	Brief	Research	Process Planning
Design	Specification	Design	Manufacturing Plan
Optimise	Prototyping	Error proofing	
Validate	Test	Evaluate	

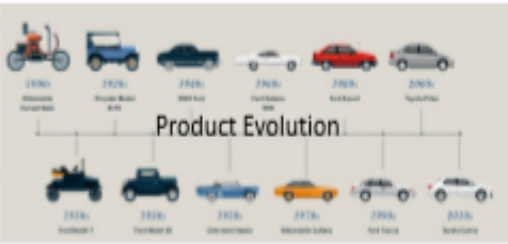


- A **Design Brief** is a ***statement of how you are going to solve the Design Problem.***
- Research findings and Client feedback can be used to create a **Process Plan.**
- A **Design Specification** is a ***list of requirements your product has to meet in order to be successful.***
- After a Specification has been developed, the **designing** of the product will begin.
- Once the final design has been chosen, a **Manufacturing Plan** is then created.
- **Prototyping** is the creation of a **model or "mock-up"** of a product after the Design Process
- **Error Proofing** is ensuring that the product cannot be assembled or used in an incorrect way
- **Testing** and **Evaluation** happens because designers need to ensure the product is successful before being released, and is competitive with the market.



Anthropometrics is the ***study of measurements of the human body***
Ergonomics is the ***application of anthropometrics in order to make products and places efficient, comfortable and safe to use***

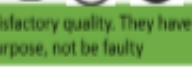
Technology Push is when *new developments in materials and technologies improve existing products/ create new ones*
Market Pull is when consumers demand improvements/new products. Often found by conducting market research



British Standards Kitemark shows that a product has consistently met the requirements of the British Standards Institute. These regulations are of a higher standards than European ones

CE

European Conformity Symbol shows that a product has consistently met the minimum requirements of the EU



Sales and Supply of Goods Act 1994	All Products have to be of a "satisfactory quality. They have to be safe, fit intended purpose, not be faulty
Trade Descriptions Act	False or misleading information must not be given out about products. E.g. accurate information must be given out who made the product
Consumer Protection Act 1987	The right to claim compensation if a defective product causes death, damage or injury
The Waste Electrical and Electronic Equipment Regulations 2013	The government regulate the amount of electronics going to landfill as the chemicals and electronics can harm the environment and wildlife Companies must provide electronic disposal for their products

One-off Production
This is the manufacture of **one item**
This item can be custom made/ designed (bespoke manufacture)

Batch Production
This is where small quantities of identical items are made (10s-1000s)
To ensure all items are identical, jigs, moulds and templates to aid workers

Just-in-time production (JIT)
This is when products made to order, but can be used in conjunction with any other scale of production

Mass Production (High-Volume Production)
This is where large quantities of products are made (10,000s-100,000s)
There are often assembly lines (for the main product) and sub-assembly (for small pieces and components)

Continuous Production
This is when large quantities of products is produced (100,000s +)
However, unlike Mass Production this is **never ending** production e.g. power plants

Aesthetics – What the product looks like, style, colour etc.
Customer – Who is the target market, how it will appeal to them, what Anthropometrics/ ergonomics will be used
Cost – cost to make, cost to sell
Environment – where it will be used, is it sustainable
Safety – how it will be safe to use, what standards and regulations it meets
Size – what dimensions it will be, as well as components and parts
Function – what the purpose of the product will be and what features it has
Materials – what it is made from
Manufacture how it will be made

Product requirements are what a product has to meet/ must do.
Common requirements are:

- Features – *what makes a product unique and sellable*
- Performance – *how well it completes its function*
- Target Market – *how it appeals to its customers*
- Working Environment – *how it is suitable for where it will be used*
- Constraints – *what is must do or must not do*
- Ergonomics – *how its comfortable and safe to use*
- Lifecycle – *what environmental impact it makes (and how that can be reduced)*

DT: Engineering

Modelling is used to test:


Scale


Proportion


Function

Types of modelling

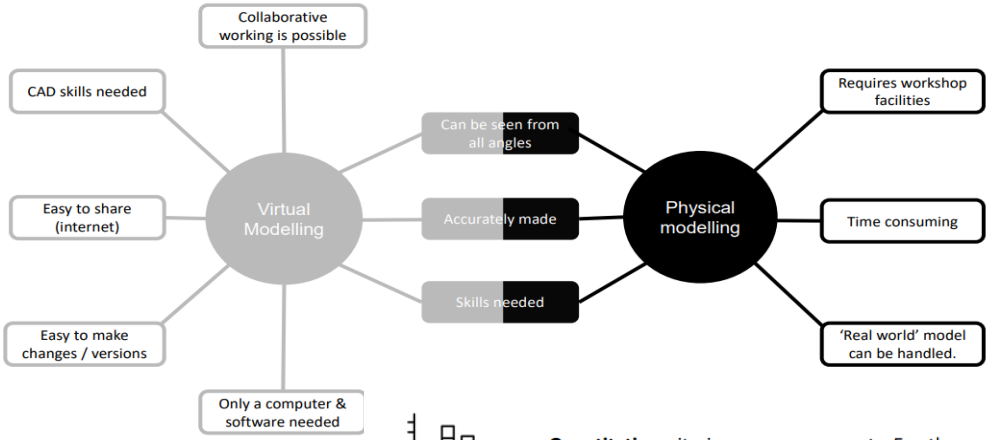

Virtual


Physical

Evaluation of model

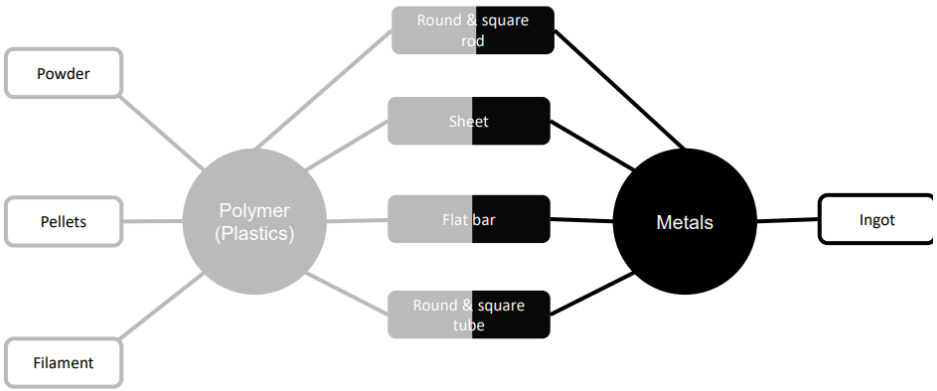
All models or prototypes are compared with the design **brief** and **specification**.

In **iterative** design, this leads to an **improved design** which is then modelled.



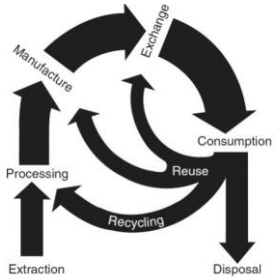
Wasting	Shaping	Forming	Joining	Finishing	Assembly
					
Changing shape by removing material	Forming a shape by moulding or laying up composites.	Changing shape by deformation.	Permenant or temporary fixing.	Creating a surface finish for technical or aesthetic reasons.	Adding components together into a single product.

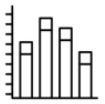
Polymers and metals have some stock forms in common.
Other materials have their own standard stock forms.



Circular Economy

In a circular economy, products, components and materials are reused and recycled instead of being thrown away





Quantitative criteria are measurements. E.g. the amount of memory in a phone or the capacity of a battery.

Qualitative data are based on opinions, impressions and points of view. E.g. how comfortable a handle should be or how attractive a bath tap must be.


ted by Vector Portal

Needs criteria are essential and must be included in a design. E.g. an emergency stop button on a machine.

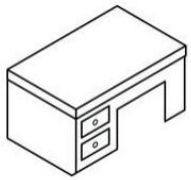

l by Stanislav Levin
e Noun Project

Wants are criteria that are not essential but desirable. E.g. 1950s aesthetic styling on a food mixer.

	Buildings	Capital cost
	Equipment	
	Workers	Labour cost

DT: Engineering

Isometric
A formal 3D style drawing.



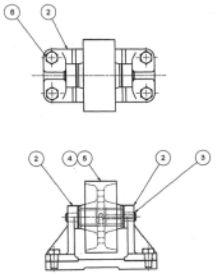
Start at the corner all lines

Oblique
Another 3D style that is less realistic that isometric.

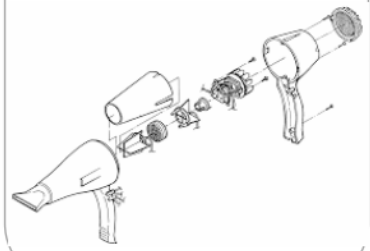
Start with front 'face' then

Freehand sketching
An informal style used to communicate ideas quickly.

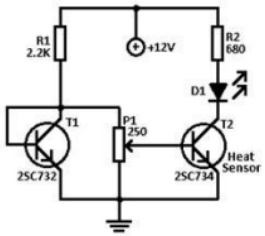
Assembly Drawings
Drawings that show all components assembled together.



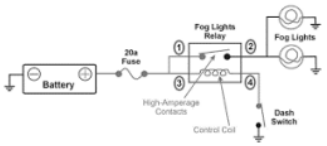
Exploded views
A type of assembly drawings that shows space between parts.



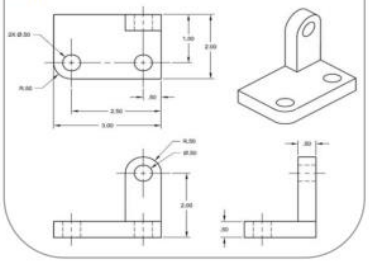
Circuit Diagram
Used to show how electronic components are connected in a circuit.



Wiring Diagram
Shows how connections should be made within larger electrical systems.

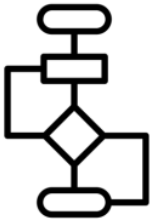


Orthographic drawing
A formal style of 2D drawing usually used to show dimensions. Drawn to scale.



Block diagrams
A diagram of a system showing how stages relate to each other.

Flowcharts
Used to show a decision making process.



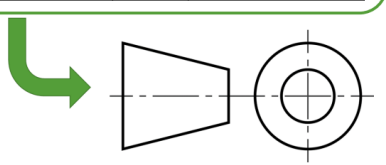
Working Drawings

Outline		Tolerance	
Centre Line		3rd Angle	
Dimension Line		External Thread	
Hidden Detail		Internal Thread	
Projection		Knurl	
Leader Line		Blind Hole	
Diameter	∅	Chamfer	
		Countersink	
		Through Hole	

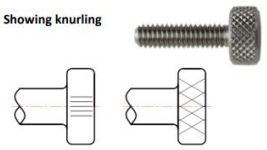
Across Flats	AF
Centre Line	CL
Diameter	DIA, D and Ø
Drawing	DRG
Material	MATL
Square	SQ

Title block example

Title:	Desk lamp base	Date:	19/1/23	Drawn by:	P Miles
Scale:	1:1	Version:	3	Tolerance:	± 0.2 unless stated otherwise
All dimensions in millimetres					



Showing knurling



Straight Knurling *Diamond Knurling*

A/F	Across flats
CL	Centre line
Ø	Diameter
DRG	Drawing
MATL	Material
SQ	Square

DT: Engineering

Command words	Meaning
Analyse	Separate information into components and identify their characteristics. Discuss the pros and cons of a topic or argument and make reasoned comments.
Compare and contrast	Show the similarities and differences.
Conclude	Make a decision after reasoning something out.
Define	Give the meaning of.
Describe	Give a detailed account of.
Differentiate	Explore and explain the differences.
Discuss	Explore the subject by looking at the advantages and disadvantages.
Explain	Describe, giving reasons and causes.
Evaluate	Give an opinion by exploring the good and bad points.
Identify	Recognise or prove something as being certain.
Illustrate	Show by explaining and giving examples.
Interpret	Explain the meaning by using examples and opinions.
Justify	Give good reasons for offering an opinion or reaching a conclusion.
Outline	Concentrate on the main points of the topic or item.
Summarise	Give the main points of an idea or argument. Leave out unnecessary details.

1 Mark Questions *– Identify/name/label*
2 Mark Questions *– Identify and explain/ define/label 2 items*
3 Mark Questions- *Identify/explain/give reasons/ label 3 items*
4 mark Questions *– Often Identify/ explain and describe/label 4 items*
5 mark Questions *– Often Identify/explain/ describe/justify label 5 items*
6 Mark Questions *– Extended writing piece, needing detail, multiple examples and use of key terms.* ***This is the only question in the paper that marks Spelling, punctuation and grammar.***

A mark a minute

BOX the command word i.e. describe, explain, evaluate, assess

UNDERLINE key ideas to focus in, to understand what content will be needed in their answers

GLANCE over the question to make sure you include everything needed

(c) Explain how standard components can improve the sustainability of new products.

(b)	Award one mark for each valid reason e.g. • Guaranteed quality (1) • Less expensive to purchase / cheaper (1) • Compatible with standard tools / no specialist tools required (1) • Readily available / widely used / large quantities (1) • Easily replaceable (1) • Standards understood globally (1)	2	Accept suitable alternative answers. Do NOT accept 'they are easy to make/not complex to make.' Only award 'easier to understand' if qualified by 'global standards' / 'compatible with standard tooling' or similar

[3]

If you get stuck write down all the key words that you know are relevant first at the bottom of the page. Then use this to start building your sentence. Tick off each key word as you go

Tip:
3 marks so 3 minutes
3 marks so 3 points to be made
Always make extra points if you can give an opportunity to gain marks
Explain so needs reasoning

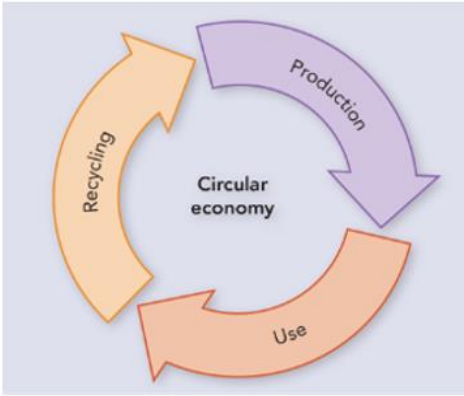
Command verb	Meaning
State	Express in precise terms, express in unequivocal terms
Suggest	Give possible alternatives, produce an idea, put forward, eg an idea or plan, for consideration
Identify	Recognise, list, name or otherwise characterise

Working Drawings

Outline		Tolerance	
Centre Line		3rd Angle	
Dimension Line		External Thread	
Hidden Detail		Internal Thread	
Projection		Knurl	
Leader Line		Blind Hole	
Diameter	∅	Chamfer	
		Countersink	
		Through Hole	

Across Flats	AF
Centre Line	CL
Diameter	DIA, D and Ø
Drawing	DRG
Material	MATL
Square	SQ

Discuss	Give an account that addresses a range of ideas and arguments	I have a variety of different chairs in my home. All of them have a seat, back rest and are supported by legs. It is possible to have a chair with three legs but most have four. The back rest is what defines the chair otherwise it could be called a stool. When buying a chair, I would consider the room it is for, the design and colour and the price. It is important that it is fit for purpose and that it is comfortable.
Explain	To give account of the purposes or reasons	A chair is used for sitting on. It normally comprises a seat; a backrest and is supported by legs. The legs are positioned in such a way so as to balance the chair, so that when it is sat upon it does not collapse or become unstable. Chairs can be made in many different styles and use a variety of materials. The design and material choice are reflected in the cost of the chair. Chairs are often used alongside a table, to support body weight at a convenient height whilst doing something at the table. Chairs can be produced in different sizes to make them suitable for individuals eg a child.



Design Development – sketchbook pages

Development and refinement of ideas:

GCSE Textiles - AO4

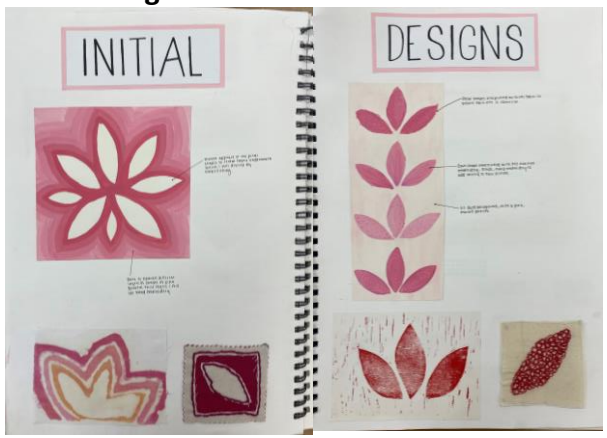
Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

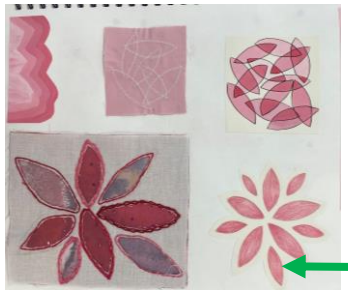
Use the words in the assessment objective to help you understand what it is you should do:

Personal and meaningful response –Your response to a source should be personal to you. What your feelings and reactions are. It must be meaningful by relating to your source inspiration. Make sure everything links and is not random.

Demonstrates understanding of visual language – being able to combine different textures, colours, techniques in an aesthetically pleasing way.

Initial designs:





Final design – label with techniques you intend to use

Create a wide range of fabric samples before creating your final design

Level 1/2 Hospitality and Catering:
Unit 2-2.2.1: Factors affecting menu planning

Factors affecting menu planning

You need to be aware of the following factors when planning menus:

- **cost** (ingredients as well as business costs)
- **portion control** (value for money without waste)
- **balanced diets/current national advice**
- **time of day** (breakfast, lunch, and dinner menus as well as small plates and snacks)
- **clients/customers** (a menu with prices that will suit the people who visit your establishment).

Equipment available

You need to know and understand the type of equipment needed to produce a menu. The choice of dishes will be influenced by the equipment available to the chef.

This includes kitchen equipment such as:

- hobs, ovens, and microwaves
- fridge, freezer and/or blast chiller
- specialist equipment, for example a *sous vide* or pizza oven
- hand-held equipment, for example electric whisks or hand-blenders
- other electric equipment, for example food processors.

Skills of the chef

The skills of the chef must be suited to the type of provision and the menu offered.

A Michelin starred restaurant will require a chef who has complex skills in preparation, cooking and presentation of dishes.

A café will require a chef who has a range of medium and complex skills to produce a suitable menu.

A large restaurant will normally have a full kitchen brigade while a smaller establishment may only have a single chef with one or two assistants.

Time available

The type of provision will influence the amount of time a customer may be willing to wait for their dish to be prepared. Can the chef prepare, cook, and present more than one dish at the same time? Can some items be made in advance?

Time of year

The time of year can affect menu choices. Light and cold dishes such as salads are better suited to the summer months. Hearty dishes such as stews are more suited to the winter. Special dishes linked to holidays such as Christmas and Valentine's Day may also be included. The availability of **seasonal** produce can also affect menu choices as certain commodities, for example strawberries, are less expensive when in season.

Environmental issues

The chef will need to think about environmental issues when planning a menu. Can the chef **reduce** the amount of ingredients bought as well as reducing food waste? Can the chef **reuse** ingredients to create new dishes for example stale bread made into bread-and-butter pudding? Can the kitchen **recycle** waste wherever possible? Running the kitchen sustainably will save money.

Organoleptic properties

Organoleptic properties are the sensory features of a dish (**appearance**, **aroma**, **flavour**, and **texture**).

The chef will need to think about how the dish will look and taste. Is there a range of colours? Do the flavours go well together? Are there a variety of textures?

Level 1/2 Hospitality and Catering: Unit 2: 2.2.1 Factors affecting menu planning – Environmental issues

Sustainability

Many diners are interested in hospitality and catering provisions that provide sustainable dining.

The aim of the three Rs of sustainability is to conserve natural resources and prevent excess waste. By following the rules of reduce, reuse, and recycle, hospitality and catering provisions can save money at the same time as attracting more diners and bringing in more profit.

Sustainability also means buying local produce, using organic ingredients, buying meat and poultry from farm assured producers who guarantee better welfare for the animals, using Marine Stewardship Council sustainable fish and offering meat-free versions of favourite dishes.

Reduce

Food waste: If food and waste were its own country, it would be the third largest producer of greenhouse gas in the world! If it cannot be used to make new dishes or given away, then as much food waste as possible should be composted.

Energy use: Hospitality and catering provisions can save energy in many ways including using low-energy lighting, maintaining and upgrading equipment, putting lids on saucepans, batch baking and cooking.

Food miles: Using local suppliers means that the food does not have to travel as far from 'field to fork'.

Water usage: Use less in cooking by only just submerging vegetables or using a steamer. Use an energy and water efficient dishwasher.

Reuse

Food that is past its best, for example a brown banana, or scraps such as bones can be used to create new dishes which in turn will decrease food waste. www.lovefoodhatewaste.com has a vast range of recipe ideas for using surplus food.

- Bread: breadcrumbs, bread and butter pudding, bread sauce and croutons.
- Meat and poultry: bones can be used to make stocks.
- Fruit: banana muffins, apple crumble, fruit coulis, smoothies.
- Vegetables: bubble and squeak, vegetable stock, vegetable bakes, omelettes.
- Eggs: whites can be used to make meringue; yolks can be used to make mayonnaise.

Recycle

Many hospitality and catering provisions have separate bins for recyclable materials. Professional kitchens should also have areas to separate waste into recyclable, non-recyclable and compostable materials. All staff should be trained to know how to dispose waste correctly.

Coffee grounds can be composted. Compost can be used to grow fruit, vegetables and herbs for use in the kitchen.

Jars and plastic containers can be used for storage in the kitchen. Glass bottles can be used to hold flowers or candles as table decorations.

Too Good To Go, Karma and *Olio* are apps used by restaurants and supermarkets. Customers can buy discounted food which would otherwise go into landfill.

A to Z of...

Based on your ***OPTION SUBJECT***, recall any key information from the current topic you have been studying.

A	B	C	D
E	F	G	H
I	J	K	L
M	N	O	P
Q	R	S	T
U	V	W	X
Y	Z		

By the end of this topic, you should be able to evaluate your own performance in planning and leading a sports activity session…

5.1 Review your leadership of a sports activity session

5.1.1 Planning
- Positives - What went well
- Negatives – What didn't go well

5.12 Leading
- Positives - What went well
- Negatives – What didn't go well

5.1.3 Improvements that could ne made

5.1.4 Opportunities to develop leadership skills in the future

Some issues that may have happened in your session:

1. You only spent 3 minutes on a drill and when moved on. Group could not do the next drill.
2. Learners weren't motivated to do the drills.
3. You couldn't see all the group as you were leading the session.

Consider what you could do differently next time.

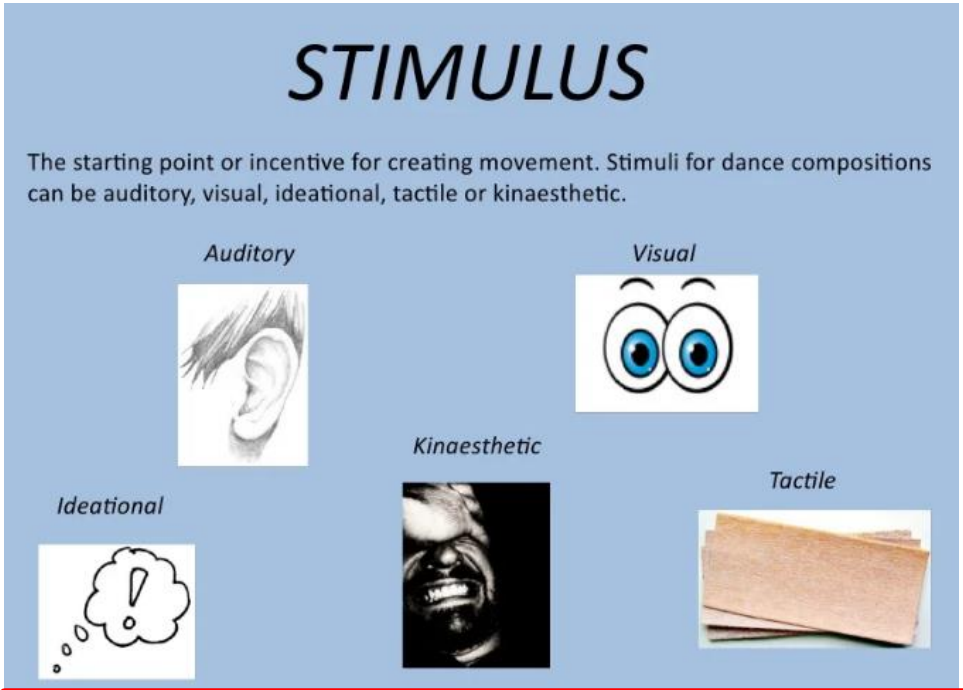
Exemplar:

My first strength was my creativity within my session plan. I planned two thoughtful drills which I researched on the internet. This meant that I knew exactly how to set them up and I had all the distances written down so the spacings were realistic which meant that the drills ran smoothly. The teacher that observed me said that my drills were very good and that everyone was motivated.

Once I explained my drill the class engaged in the drill fully and seemed to really enjoy it and they looked like they were trying hard. I made it a competition by saying that pupils had to grab a bib once they had scored and take it back to their team and then the first team back with all their bibs were the winners. This motivated both teams as they could see the other teams getting bibs and were able to see if they were losing so that motivated them to try even harder.

Pupils were demonstrating a good shooting technique and they started to score more baskets as the session went on. I was really pleased with this drill and think that it worked well.

Year 11 Dance: Creating a dance



Choosing your stimulus

- A stimulus is something that inspires you to create a dance and provides a starting point for you to explore movement ideas.
- Artists respond to the world around them, whether they use movement, sound, images or words.
- Some artists have an important or serious message to communicate.
- Some artists enjoy playing with the material and ideas that they generate.
- You can stick very closely to the stimulus using it to guide or shape the material.
- Your dance might develop in a different direction, once the stimulus has done its job of getting you started.

How to select your stimulus

- When you have an idea for your dance and you think it will fit the theme, research it further, see what information you can find that will help you.
- Is there any professional works that you can find that are similar that can help influence your work?
- Create a detailed mind map of your ideas to help you when you are in the creative process. Think of the emotions, the energy, the dynamics, type of movements, genre etc. that are needed to help meet with your stimulus and tell your story.
- If the mind map is hard to complete or a bit empty, don't be afraid to "bin" that stimulus and try another one
- What social, historical, cultural, political or community will influence your work?

Unit RO34: Creative and therapeutic activities TA4 Planning and delivering a creative session

Planning/aims of the activity:

- The purpose
- Timescales
- Resources needed
- Safety
- Communication
- Appropriateness
- Methodology
- Demonstration
- Group work
- Individual contribution
- Feedback methods

Delivering a creative activity:

- Introduce the activity
- Aims
- Content
- Settle the individual
- Supervise the activity
- Encourage participation
- Intervene when necessary
- Provide support
- Maintain safety
- Keep to timescales replenish resources/materials
- Collect feedback

Evaluation

- How to use feedback
- Self-reflect
- Review strengths and weaknesses
- Communication skills
- How you encouraged them
- Suggest improvements: What would you do differently, why?

Useful sentence starters:

The impact is...
As explained by ...
This is important because...
In reflection ...
Overall ...
I think that ...
Their needs would be met by...
This is suitable because ...
The benefit is...
The advantages is ...

Furthermore
As well as
Another essential point
Consequently
Firstly, . . . secondly, . . .
thirdly, . . . finally, . . .

Roll-a-dice Revision

Based on your ***OPTION SUBJECT***, create questions for each square on the grid. Once you're done, take it in turns to roll two dice and answer the corresponding questions.

	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

Production Processes

Job Production

Advantages	Disadvantages
• Products are usually high quality; • Product can be made to meet the needs of the individual customer; • Workers often get more satisfaction from working on something until it is finished.	• Costs Of production will be high; • Labour costs may be high because job production often require skilled labour.

Each product is made individually to meet the specific needs of the customers.

Batch Production

Advantages	Disadvantages
• The needs of different customers can be met by making batches of different goods; • Batches are made to meet specific orders from customers and this may reduce costs because the goods do not need storing; • It may be possible to use specialist machines and to automate production so that costs are saved.	• It takes time to switch production forma batch of one product to a different batch. Machinery may need to be re-set. This adds to the costs of production and reduces output; • It may be necessary to keep stocks of materials and components to be able to switch production when required. Holding stock is a cash flow problem – the materials have been paid for but revenue is not being earned. There are also storage costs; • There will usually be less choice of products for customers compared with job production; • The tasks may be repetitive and boring for the workers.

Producing one type of product for a time and the changing production to another type of product. E.g. bakery baking one type of bread (white) and then another (wholemeal)

Flow Production

Advantages	Disadvantages
• Large amounts can be made; • The costs of production for each unit made are low because the firm benefits from economies of large-scale production; • Machinery can be used, helping to keep costs low; • Improvements in technology means that not all of the products need to be the same: some variations in design can be programmed into the computer-controlled machines.	• Goods are mass-produced and may not be of good quality, although this is not always true; • It is very expensive to set up a production line; • Large stocks of materials may have to be kept to keep the production line supplied and this may be expensive; • If the production stops at any point on the assembly line (because of a mechanical breakdown or industrial action) there may be a complete shutdown of production; • Jobs on an assembly line can be repetitive and boring.

Good produced on an assembly line – one type of good is produced continually.

Technology in Production Processes

Advantages	Disadvantages
• Costs are reduced as the number of workers required is reduced; • Machines can be more accurate than human workers, improving quality and reducing waste – again helping to cut costs; • Production can be more flexible because the computers can be programmed to produce a variety of products; • The machinery is never absent from work; • Machines can work 24 hours a day, 7 days a week; • Machines can do dangerous and boring jobs that human works may be reluctant or unable to do; • New technology can lead to new products creating demand – think tablet computers and mobile phones.	• Workers may be redundant when the new technology is introduced and this may result in redundancy payments, adding to the short-term costs of the business; • New skilled workers may need to be recruited. Often, the types of workers needed are in high demand and the business may have to pay them big salaries; • Workers may need training to work with the new technology, which adds to the business costs; • Machines can break down and this will disrupt production; • It can be expensive to buy and finance the purchase of technology; • Customers sometimes do not like technology as with automated telephone systems; • Where systems store data about people, there are security issues.

Examples of technology used in production processes = automation and robotics

Knowledge Organiser 6 : Network Security

1. Forms of Attack

Malware	Software written in order to infect computers and commit crimes e.g. fraud or identify theft. Malware exploits vulnerabilities in software
Types of Malware	Malware is term that covers (among other things) viruses, trojans, worms, ransomware, spyware and adware
Phishing	Online fraud technique used by criminals. It is designed to get you to give away personal information such as usernames, passwords, bank details, credit card details… Achieved by disguising as a trustworthy source in an electronic communication, e.g. an email or fake website.
Brute Force Attack	A trial and error method used to decode encrypted data (such as passwords). Uses every combination until it hits upon the correct one.
DOS Attack	Denial of Service attack. Floods a server with useless traffic causing the server to become overloaded and unavailable
DDOS Attack	Distributed Denial of Service Attack. Using multiple computers (zombies) in a Botnet to undertake a DOS attack
Data Interception and Theft	Stealing information from an unknowing victim's computer in order to get confidential information, or to compromise their privacy. E.g. to sniff usernames and passwords
SQL Injection	A technique used to view or change data in a database by inserting additional code into a text input box, creating a different SQL command
Zero Day Attack	An attack using an unknown and undocumented vulnerability in software code (unknown to the code owner)

2. Threats posed to Networks

Malware	• Files are deleted, become corrupt or are encrypted. • Computers crash, reboot spontaneously and slow down. • Internet connections become slow. • Keyboard inputs are logged and sent to hackers.
Phishing	• Accessing a victim's account to withdraw money, or purchase merchandise and services. • Open bank accounts, credit cards, cashing illegitimate cheques. • Gain access to high value corporate data. • Financial services can blacklist the company
Brute Force Attack	• Theft of data. • Access to corporate systems.
(D)DOS Attack	• Loss of access to a service for customers • Lost revenue • Lower productivity • Damage to reputation
Data Interception and Theft	• Usernames and passwords compromised • Disclosure / theft of corporate data
SQL Injection	• Contents of databases can be output, revealing private data. • Data in the database can be amended or deleted. • New rogue records can be added to the database.
People	Many system vulnerabilities are caused by people being careless: • Not installing operating system updates. • Not keeping anti-malware up to date. • Not locking doors to computer rooms. • Not logging off or locking their computer. • Leaving printouts on desks. • Writing passwords down on sticky notes attached to computers. • Sharing passwords. • Losing memory sticks / laptops. • Not applying security to wireless networks. • Not encrypting data.

3. Identifying and Preventing Vulnerabilities

Malware	• Security software (Spam filter, Anti-virus, Anti-spyware, Anti-spam) • Enabling OS and security software updates. • Staff training • Backup files regularly onto removable media.
Phishing	• Strong security software. • Staff training: awareness of spotting fake emails and websites. • Staff training: not disclosing personal or corporate information. • Staff training: disabling browser pop-ups.
Brute Force Attack	• Network lockout policy, Using progressive delays. • Staff training
(D)DOS Attack	• Strong firewall and packet filtering • Properly configuring servers and auditing and monitoring systems
Data Interception and Theft	• Encryption and using virtual networks • Staff training and computer use policies
SQL Injection	• Validation on text boxes • Database permissions

Knowledge Organiser 7 : Systems Software

1. Definitions

Systems Software	Systems Software is the software used to control the hardware of the computer. It is contrasted to application software which is used to enable the user to perform tasks and create content and products
Operating System	An operating system is a piece of system software that communicates with the hardware of the computer and allows other programs to run. It is comprised of system software, or the fundamental files your computer needs to boot up and function
Peripherals	Peripherals are controlled by software called device drivers. Standard drivers (mouse and keyboard) are included in the operating system, however more specialist peripherals may need drivers programmed by the manufacturer which convert signals into machine code and are installed separately
Utility Software	Utilities are programs that are installed to perform a specific function, usually to improve the efficiency or security of a computer system

2. The Function of Operating Systems

What does an Operating system do?	An operating system manages all of the software and hardware on the computer. Most of the time, there are several different computer programs running at the same time, and they all need to access your computer's central processing unit (CPU), memory, and storage. The OS co-ordinates this activity
Interaction	A user interacts with the computer by means of an interface provided by the operating system

3. Types of Interface

GUI	A Graphical User Interface provides windows, icons, menus, (mouse or other) pointer… Sometimes calls WIMP. It is visual, interactive, and intuitive. Optimised for mouse/touch input
CLI	A Command Line Interface is text based. It uses less resources than a GUI. It is more efficient but harder to learn. Often repetitive processes can be automated with scripts
Menu	A Menu Interface presents successive menus to the user with options to choose at each stage. Often used with buttons on a keypad. (Think calculator when you press the 'MENU' button)
Natural Language	A Natural Language Interface responds to questions in a spoken language. They are not always reliable but are improving all the time. (Think Siri or Alexa)

4. Features Often Provided by an Operating System

Multitasking	Running multiple applications at the same time by giving each application a small time-slice of processor time. This allows more than one program to be held in memory at a time, and data shared between them such as copy and paste. It also enables you to listen to music on your PC at the same time as word processing for example
Memory Management	When programs are loaded, the operating system decides where they are held in memory. Over time the memory becomes fragmented as programs are loaded and closed because they use different amounts of memory. The operating system must keep track of different program fragments. When the memory is full, the operating system uses virtual memory
Device Drivers	Translates operating system instructions into commands that the hardware will understand. Each peripheral will need a device driver and many common ones are built into the Operating System
User Management	Providing for different users to log into a computer. The operating system will retain settings for each user, such as icons, desktop backgrounds etc. Each user may have difference access rights to files and programs. A client server network may impose a fixed or roaming profile for a user, and manage login requests to the network.
File Management	Data is stored in files. An extension to the filename tells the operating system which application to load the file into. Files can also be placed in folders for ease of organising

5. Examples of Utility Software

Encryption	Encryption utilities use an algorithm to scramble plain text into cipher text. It can be decrypted and read again with a Key
Defragmentation	Defragmentation utilities reorganise files on a hard disk, putting fragments of files back together, and it collects together free space. This reduces the movement of a read/write head across the surface of the disk, which speeds up file access. Solid state drives should not be defragmented (it is unnecessary as they have no moving parts. It also reduces their lifespan)
Compression	Compression utilities reduce the size of a file so that it takes up less space, and is quicker to download/upload.Compressed files must be extracted before they can be read. Compression is lossy or lossless
Backup	Backup utilities take a copy of the data and place it elsewhere (disks, tapes, cloud, etc.). Backups can be either full (backup everything) or incremental (back up changes since the last backup).

Knowledge Organiser 13 : Producing Robust Programs

1. Input Validation

Validation	Does not ensure that the data entered is correct, just that it is possible and sensible
Type Check	The input is in the correct data type. E.g. Integer, Real, String
Range Check	The input is within a correct range. E.g. Between 1 and 2
Presence Check	Some data has been entered. E.g. Reject blank inputs
Format Check	The input is in the correct format. E.g. dd/mm/yyyy
Length Check	The input has the correct number of characters. E.g. 8 or more chars
Why use input validation?	• The program is more robust • The program is more user friendly • To prevent further errors occurring later in the algorithm

2. Anticipating Misuse

Division by Zero	In mathematics, there is no number which when multiplied by zero returns a non-zero number. Therefore the arithmetic logic unit cannot compute a division by zero.
Communication Error	Online systems require connections to host servers. If this connection is dropped, unable to be established or the server is overloaded, it could potentially cause a program to crash or hang when loading/saving data.
Peripheral Error	Any peripheral may be in an error mode (e.g. paper jam)
Disk Error	Programs that read and write to files must handle exceptions, including: • The file/folder not being found. • The disk being out of space. • The data in the file being corrupt. • The end of the file being reached
Authentication	• Username and password to access systems. • Password recovery by e-mailing to an authenticated e-mail address. • Encryption of data files. • Check for human and not bot attempting access (e.g. reCAPTCHA)

6. Refining Algorithms

What do we mean by refining?	• Code should anticipate all inputs and it should deal with 'bad' data, or missing data, and not crash. • It should ensure prompts to the user are helpful and that the input can only be of the correct type
How to refine	Many languages have exception handling commands

3. Maintainability

Comments	These explain the purpose of the program, or a section of code. They may also explain any unusual approaches or temporary 'fixes'
White Space	Make each section of the code stand out. Use spaces so code is not cramped up and hard to read
Indentation	Mandatory in Python but use indentation to show the flow of the program
Variable Names	Use sensible variable names that have some meaning as to what they are being used for
Sub Programs	Use Procedures and functions to structure the code and eliminate duplicating portions of it
Constants	Declare constants at the top of the program

4. Testing

Reasons for Testing	• To ensure there are no errors (bugs) in the code. • To check that the program has an acceptable performance and usability. • To ensure that unauthorised access is prevented. • To check the program meets the requirements
Iterative Testing	• Each new module is tested as it is written. • Program branches are checked for functionality. • Checking new modules do not introduce new errors I not existing code. • Tests to ensure the program handles erroneous data and exceptional situations.
Final / Terminal Testing	• Testing that all modules work together (integration testing) • Testing the program produces the require results with normal, boundary, invalid and erroneous data. • Checking the program meetings the requirements with real data.

5. Suitable Test Data

Normal Inputs	Data which should be accepted by a program without causing errors
Boundary Inputs	Data of correct type on the edge of accepted validation boundaries
Invalid Inputs	Data of the correct type but outside accepted validation checks
Erroneous Inputs	Data of the incorrect type which should be rejected by a computer system. This includes no input being given when one is expected

Knowledge Organiser 11 : Programming Fundamentals 1

1. Key Terms

Variable	A value stored in memory that can change while the program is running
Constant	A value that does not change while the program is running, and is assigned when the program is designed
Operator	A character that represents an action, e.g. "+" is a mathematical Operator
Assignment	Giving a variable or constant a value
Casting	Converting a variable from one data type to another
Input	A value that is entered into the program after the program has started running
Output	A value that produced by the program and either saved or displayed to the user

2. Correct Use of Data Types

Integer	A positive or negative whole number used when arithmetic will be required
Real / Float	A positive or negative decimal number
Character	A single alphanumeric
String	Multiple characters joined together [n.b. use this for credit card numbers]
Others	Some languages have others, e.g. date, picture…

3. The Three Basic Programming Constructs

Sequence	Executing one instruction after another
Selection	Program branching depending on a condition
Interation	sometimes called looping, is repeating sections of code. Condition controlled or count controlled

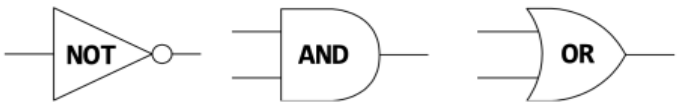
4. Common Arithmetic Operators

+	Addition
-	Subtraction
*	Multiplication
/	Division
^	Exponentiation
MOD	Modulus

5. Common Comparison Operators

==	Is equal to
!=	Is not equal to
<	Is lesser than
>	Is greater than
<=	Is lesser than or equal to
>=	Is greater than or equal to

5. The Common Boolean Operators



6. Basic String Manipulation (general)

string.length	Obtains the length of the string in characters
string.upper	Converts the string to uppercase
string.lower	Converts the string to lowercase
string.left(n)	Gets the left-most n characters of the string
string.right(n)	Gets the right-most n characters of the string
string.substring(a,b)	Gets b characters of the string starting at position a
ASC(char)	Returns the numerical ASCII value of char

Note : this is NOT the way things are done in any particular programming language. In particular Python does things differently

7. Basic File Handling Operations (OCR Reference Language)

myFile=open("…")	Open a file
myFile.close()	Close a file
myFile.readLine()	Read a line from a file
myFile.writeLine()	Write a line to a file
myFile=("…")	Create a new file
string.substring(a,b)	Gets b characters of the string starting at position a
A Workflow	myFile = open ("sample.txt") while NOT myFile.endOfFile() print (myFile.readLine()) endwhile myFile.write("Hello") myFile.close()

Note : this is NOT the way things are done in any particular programming language. In particular Python does things differently

Knowledge Organiser 12 : Programming Fundamentals 2

1. Storing Data in Records

In Text Files	• Stored on the secondary storage (hard disk/SSD/flash). • Used to store data when the application is closed. • Useful for small volumes of data. E.g. configuration files. • Each entry is stored on a new line or separated with an identifier such as a comma or tab. • Can require a linear search to find/read data which is slow (if there is no order to the data or record structure). • Structured text files E.g. CSV, XML & JSON are popular for storing and exchanging data between applications
In Arrays and Lists	• Stored in RAM. • Used to store data when a program is running. • Useful for small volumes of data an algorithm is using. • Can be single or multi-dimensional allowing for tables of data to be stored. • Uses indexes to refer to data items. • Efficient algorithms or linear searches can be used to find data
In Databases	• Often stored on remote servers. • Often used to store data shared by many users, e.g. ticket booking system. • Data is stored in records and fields. • Uses advanced data structures to store data efficiently. • Uses very efficient algorithms to search and sort data executed on the servers. • More secure than text files. • The order of the fields in the database in independent of the code
Record Structure	• A collection of related fields. • A field is a variable. • Each field in a record can have a different data type. • Note the dot syntax when using records: record<dot>Field e.g. car1.Make

2. SQL

SELECT	which fields to be returned. * can be used to indicate all fields
FROM	which table. Databases can have more than one table, each with their own unique name
WHERE	records meet a condition. LIKE and % can be used as a wildcard
Example	SELECT name, age, iq FROM person WHERE name LIKE 'FIS%'

3. Arrays

Definition	An array is a series of memory locations – or 'boxes' – each of which holds a single item of data, but with each box sharing the same name. All data in an array must be of the same data type
Use	• Indexes usually start at 0 for the first data item (known zero indexed). • Arrays may be single or multiple dimensions. • Visualise dimensions as a column (single dimension) or table (two dimension) • In Memory two dimensional arrays are still stored in a linear fashion

4. Sub programs

Why Use them	• Larger programs are developed as a set of sub-programs called subroutines. • Structuring code into sub-programs makes the code easier to read and debug. • Each sub-program can easily be tested. • Sub-programs can be saved into libraries and reused in other programs
Functions	Functions return values and create reusable program components.
Procedures	Procedures create a modular structure to a program making it easier to read. They do not return values

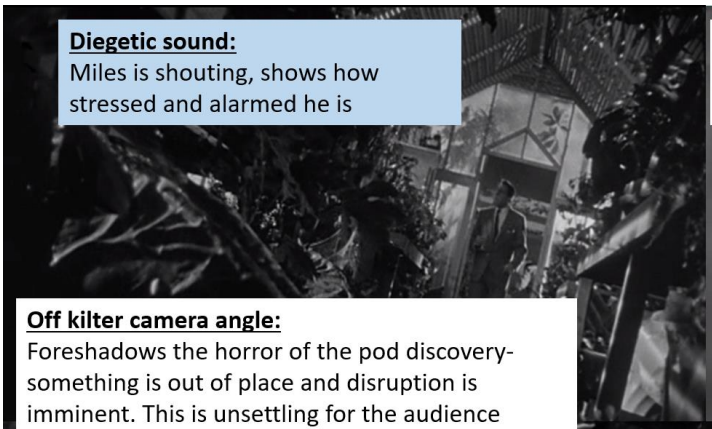
5. Random Numbers

Deterministic	Programs that run on computer systems are deterministic – with exactly the same inputs they should produce exactly the same outputs.
Real World	Randomness is easy to produce in the real world – spinning a wheel, rolling a dice and so on are millennia-old techniques but producing the same randomness in a computer program is actually rather tricky
Computer	• Computers do not produce random numbers at all • They use complex mathematical techniques to produce a series of numbers that may appear random but are really only an approximation to randomness (called pseudo-random numbers) • We refer to them as random numbers anyway
OCR Reference Language	myVariable = random (1,6) will produce a random number between 1 and 6

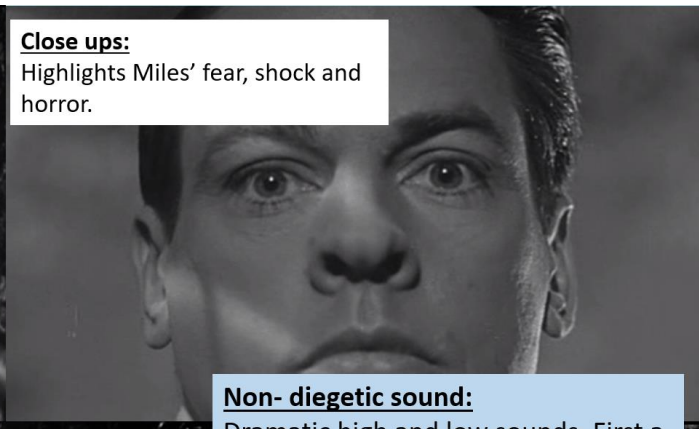
Paper 1 Section A: US Comparative Study Sci-Fi

Invasion of the Body Snatcher and E.T.

1). How aliens are presented AND Emotions of humans when they see the alien



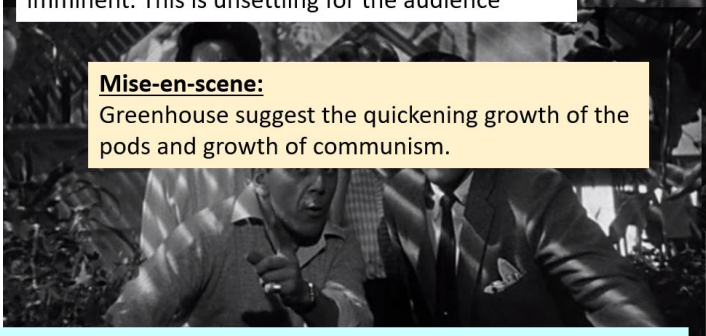
Diegetic sound:
Miles is shouting, shows how stressed and alarmed he is



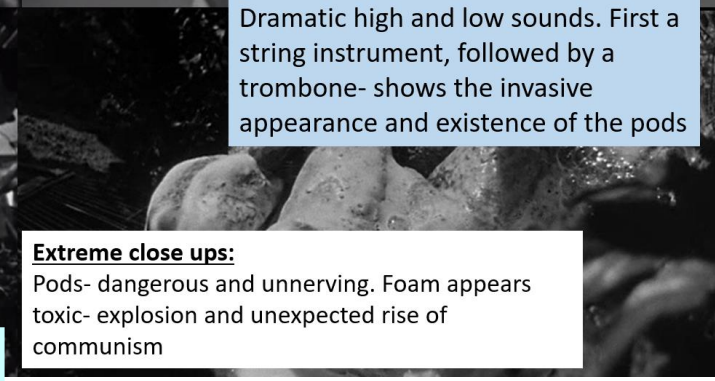
Close ups:
Highlights Miles' fear, shock and horror.

Off kilter camera angle:
Foreshadows the horror of the pod discovery- something is out of place and disruption is imminent. This is unsettling for the audience

Non- diegetic sound:
Dramatic high and low sounds. First a string instrument, followed by a trombone- shows the invasive appearance and existence of the pods



Mise-en-scene:
Greenhouse suggest the quickening growth of the pods and growth of communism.



Extreme close ups:
Pods- dangerous and unnerving. Foam appears toxic- explosion and unexpected rise of communism

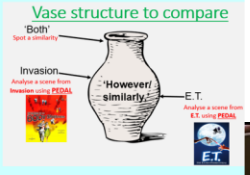
Comparison of alien presentation and human emotions in *Invasion* and *E.T.*

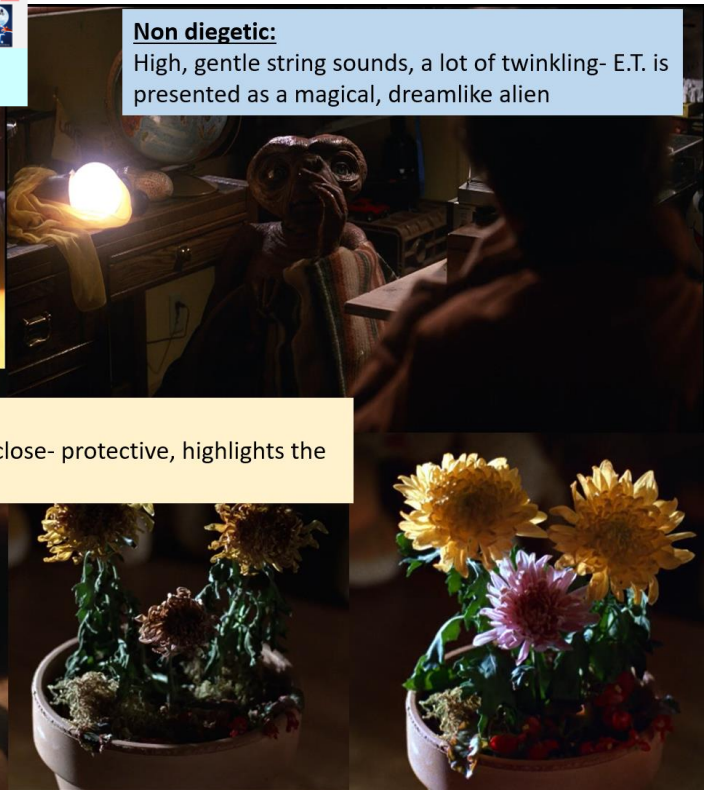
Using the knowledge our analysis of both films, how are the following presented differently in each film.

- Both films present **aliens** in different ways:
In ***Invasion***, they are presented as... **Dangerous (takes life away)**
However,
In ***E.T.,*** the alien is presented as... **Helpless/ victims (give life)**

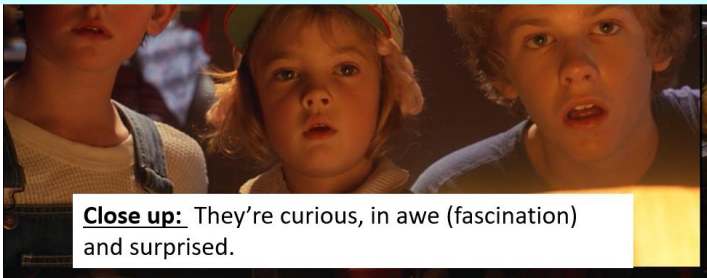
- Both film present **human emotions** towards aliens in different ways:
In ***Invasion,*** humans are... **Fearful**
However,
In ***E.T.,*** humans are... **Curious**

Vase structure to compare





Non diegetic:
High, gentle string sounds, a lot of twinkling- E.T. is presented as a magical, dreamlike alien



Close up: They're curious, in awe (fascination) and surprised.

Mise-en-scene:
Elliot's bedroom/ close- protective, highlights the innocence of E.T

Mid shot:
E.T appears less threatening, helpless, vulnerable, hesitant and scared. Distrust of context, E.T trying to work out if he can trust them.

Aliens as 'the other'

* different, unusual

How are the aliens presented as *'the other' in ***Invasion of the Body Snatcher?***

Focus your analysis on the ***effect of the aliens*** in the following scene.

- Invading
- Taking over the city and peoples lives
- Giving out seed pods according to the family needs which is communism
- Dangerous- want to cause death

Analysis:

-**Body language-** all the same, uniform

Diegetic sound- Giving out orders

Diegetic sound- Alarms and sirens- danger that awaits them

Establishing shot- their invasion is spreading. It's affecting a large group of people

Aliens as 'the other'

* different, unusual

How are the aliens presented as *'the other' in ***E.T.?***

Focus your analysis on the ***effect of the aliens*** in the following scene.

Effect of the alien:

- curious
- comic relief

Analysis:

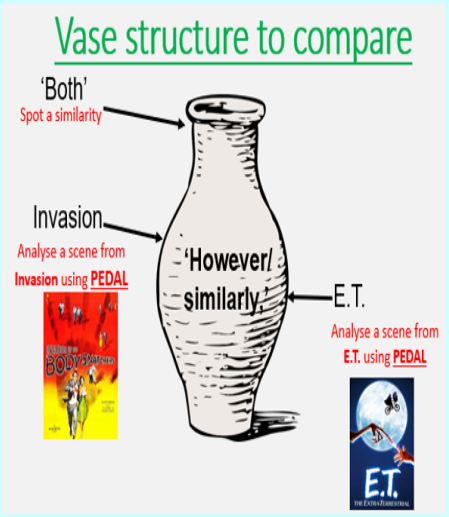
Props and costume: Dressed like an old woman, want him to look human

Body language: Drinking beer- curious about how he will be affected by it. Behaves like a human

Dialogue: Shocked and asks him to continue speaking in English.

Comparison of themes in *Invasion* and *E.T.*

Using the knowledge and analysis of both films, how are the following presented differently in each film.



- Both films present **fear of the unknown** in different ways:

In ***Invasion***, this is presented when... Miles and Becky are hiding PEDAL

However,

In ***E.T.,*** fear of the unknown when... Elliott hides E.T. PEDAL

- Both film present **aliens as 'the other':**

In ***Invasion,*** the pod-people are... invading, taking over human lives, dangerous, want to cause death, VILLAIN PEDAL

However,

In ***E.T.,*** the aliens is... Curious, comic relief, victim PEDAL

Fear of the unknown

When in the films is theme presented?

Think about the 'closet' scenes in both films. Why are these characters in there for? **What do they fear?**

- **Camera shot and body language :**

Low angle. Makes the pod people appear as though they are overtaking everything, are superior. Miles and Becki are crippled to the floor by the fear of the pods

- **Diegetic Sound:**

Whispers highlight the fear they have.

Top lighting:

Represents the pods as things to be feared.

- **Camera shot and body language :**

Mid shot- ET appears less threatening to the children. Low angle shot of children makes them appear more fearful to ET, than he does to them. Heart shape of face- ET has captured the hearts of the children, community, he's a healer, gives life.

- **NON- Diegetic Sound:**

twinkling, magical- fantasy like, make ET appear inviting, no fearful

Colour/ lighting:

Soft/ subtle lighting, ET appears warm and inviting

Ending

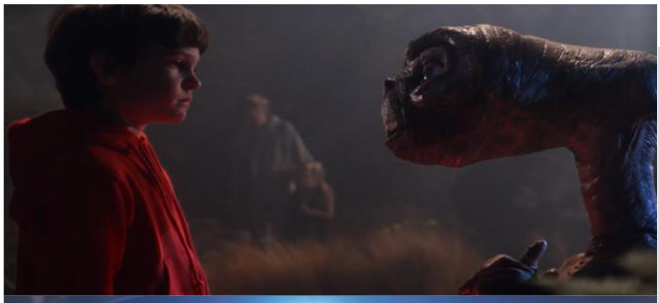
Camera shot-
Establishing shot of Miles in middle of the road, with cars driving past. Represents how the idea of communism is here and people are ignoring the dangers it could bring. Highlight how he is alone in the situation-small minority of people either agree/ disagree with communism.

No reinstatement of equilibrium because communism was still a threat.

Analysis:
-Body language- …
Miles is running away from the pod people, the reinstatement of equilibrium is out of reach. Frantic movement mimics how the situation is the same and will not be resolved. Running away from communism (the pod people).

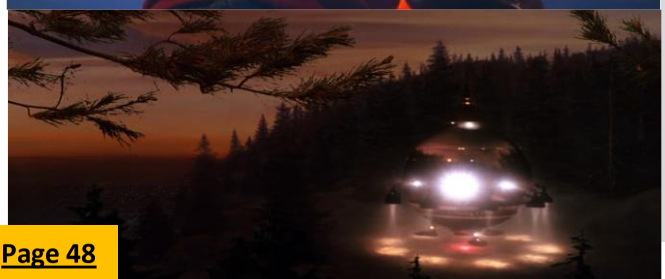
Diegetic sound
Miles is shouting "you fools, we're in danger". Society was chaotic at the time and their view of communism was extreme. Sounds of horns beeping and tyres screeching represents the disruption, warning and danger of communism.

Non- Diegetic sound;
Violin sounds vary in pitch (high and low), dramatic in nature, could represent the chaos society was in at the time and cries of people



Camera shot-
Low angle shot of E.T. he was empowering Elliot and his family.

Lightening- Most of the lighting is prominently high key lighting. Back lighting. Shows how ET has the one that provided the comfort and love of a fatherly figure which was lacking during the time the film was made.
Non- Diegetic sound of xylophone, trumpet, string, trombone, high emptions, triumphant reinstatement of equilibrium.

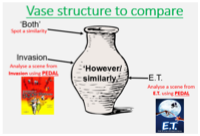


Analysis:
Camera shot-
Establishing shot of Spaceship- E.T. bought hope and joy to Elliot's household (dad not there) and now to himself because he's going home.

Film Studies

Comparison of the ending in *Invasion* and *E.T.*

Using the knowledge and analysis of both films, how are the following presented differently in each film.



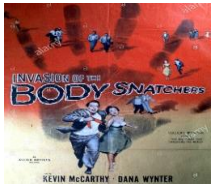
- Both films present the **ending** in different ways:

In ***Invasion***, this is presented when... Miles makes a shocking discovery

However,

In ***E.T.,*** the ending shows the reinstatement of equilibrium when...

Elliott says goodbye to E.T. near his spaceship



Invasion of the Body Snatcher- 1956

Context of the film:

The events before and after the making of the film.

- The **Cold War-** a long period of tension between the US and Russia;
- **Communism** is system of social organisation in which all property is owned by the community and each person contributes and receives according to their ability and needs;
- Communism was a **threat** to the US, as the US was recovering from the Great American Depression;
- The space Race between Russia and America;
- Americans believed in aliens after the Roswell incident in 1947;
- Fear of brainwashing in American society., as a result of the Korean/ Vietnam War
- The aliens 'pod people' represent American fears of Russian invasion

E.T- 1982

Context of the film:

America in the 1980s

- Lost trust in its government, its army and with each other.
- **President Nixon – Watergate Scandal- cash was stolen to help fund his re-election campaign.**
- If the President directly lied to the American people, you can see why the early 1980's was seen as a period of distrust in American society.
- The biggest difference between the 1950s and 1980s was thus an increase in lone parent families,
- There was a huge rise in the divorce rates
- The government were not trusted – Vietnam and a whole series of events in the 1970s meant that Americans did not trust authority

Key Word	Meaning
Clef	Musical symbols *(including Treble, Bass, Alto, Tenor/C-clefs)* placed at the left-hand side of a musical stave, indicating the pitch of the notes written on it to the performer.
Concert Pitch	Refers to the pitch reference to which a group of musical instruments are tuned for performance. An internationally agreed standard is for the tuning of musical instruments, in which the note A above middle C. has a frequency of 440 Hz.
Descriptive Music	Also called "Programme Music". Descriptive music suggests visual images or "telling a story". The descriptive idea or storyline is known as the "programme". The opposite of descriptive music is "absolute music" which is music that doesn't attempt to describe something particular and is more concerned with form and structure.
Elements of Music	Several different things which have often been called "the building bricks of music" and include: Pitch, Dynamics, Duration, Tempo, Texture, Timbre/Sonority, Attack and Decay and Silence. When a composer creates a piece of music, they use the elements of music to build it, just like a builder uses bricks.
Ensemble	A group of musicians who perform together.

BTEC Music Knowledge Organiser- BTEC

Describe some of the capabilities and limitations of your own instrument voice or technolody in terms of its range and characteristing timbre.

Describe how your own instrument, voice or technology is used in different genres.

Describe what types of ensemble your own instrument, voice or technology might be used in.

Describe how your own instrument, voice or technology's use is influenced by context and culture.

Describe some of the capabilities and limitations of your own instrument voice or technolody in terms of the techniques required to play it and any techniques specific to it.

TA2: Stages and types of play

Types of play	Definition
Solitary Play	Playing alone.
Parallel Play	Playing alongside others.
Associative play	Some playing with each other.
Co-operative play	Playing with someone else.

Types of play	What is it?	Examples
Manipulative Play 	This involves children using their hands, (fine motor skills). For example, to move, turn or screw things to make them fit.	· Puzzles; · Mark making (drawing/ painting/ writing); · Shape sorters; · Threading beads; · Craft activities.
Co-operative play: 	Play which takes account of others actions within their play together: sharing, group play e.g. shop keepers and customers or games that have rules to follow.	Board games; · Circle games (here we go round the mulberry bush/ the farmers in his den); · Playground games (what's the time Mr. Wolf?); · Imaginary role play (dressing up/ toys/ teddies/ tea sets); · Imaginary play with small world toys (cars/ farm set/ dolls house).
Solitary play: 	Where the child plays alone, in their own space, exploring and experimenting with objects.	· Imaginary play (role play/ small world play); · Puzzles; · Books; · Video/ computer games.
Physical play: 	Play that involves gross motor skills, the muscles and moving around, such as football or a climbing frame.	· Ball games; · Running/ jumping/skipping/ hopping/ crawling etc; · Playground equipment (slides/ swings), Ride– on– toys and bikes; · Push and pull toys; · Dancing.
Creative play: 	Where children experiment with materials, collage, painting, music, imagination.	· Music and dance; · Mark making (painting/ drawing/ writing); · Making models; · Sand and water play; · Stories and imaginary play.

R085 – Developing a Multi-Page Website – L03

1: Remember the Scenario!

At the start of this unit you would have been given a **scenario** or **client brief** that outlines what needed to be done for the **Website** and who it should be aimed at. The first part of the review should go back over the **client requirements** and **target audience** and you should give a brief overview of what they were and whether you think your Website meets the full requirements and is suitable for the target audience. These points can then be expanded on when discussing the strengths, weaknesses and improvements.

2. Strengths

The **strengths** of a document are anything that makes it suitable or effective for its **purpose**. Some common examples of strengths to look out for are in your Website are:

- Does it meet the requirements of the client?
- Is it suitable for the target audience suggested?
- Do all of the links on the **navigation** bar work
- as intended?
- Are the **assets** used in the website of **high quality**?
- Is the placement of text, images, videos, sounds, maps suitable?
- Does it match up with the proposed **design?**
- Is there no horizontal scrolling?

Is it **consistent**? Do the logo, banner, navigation bar and **colour scheme** remain in the same place on each page?

3. Weaknesses

The **weaknesses** of a document are anything that does not make it suitable or effective for its purpose. Some common examples of weaknesses to look out for in your website p are:

- It fails to meets some parts of the client requirements.
- It is not suitable for the target audience.
- The links are broken and do not take you to the
- suggested pages.
- The assets used in the website are of poor quality.
- The placement of text, images, videos, sounds and maps are poor and may distract the reader from the focal point of the website.
- It does not match with the proposed design due to issues with using the software.

It is not consistent and the logo, banner, navigation bar and colour either change each page or move around too much.

There is horizontal scrolling.

4: Improvements

Once you have picked out some of the weaknesses you will then need to suggest how to **improve** those weaknesses.

An improvement is anything that would make the Comic Strip more suitable for its purpose and target audience.

When writing your suggestions for **improvement** follow the steps below:

- Choose one of the weaknesses you may have
- already mentioned.
- Make sure you have said why it is a weakness in relation to the client requirements purpose and target audience.
- Suggest how to improve based on that weakness.
- Explain how it would make the document better for the purpose, client requirements and target audience.

Examples

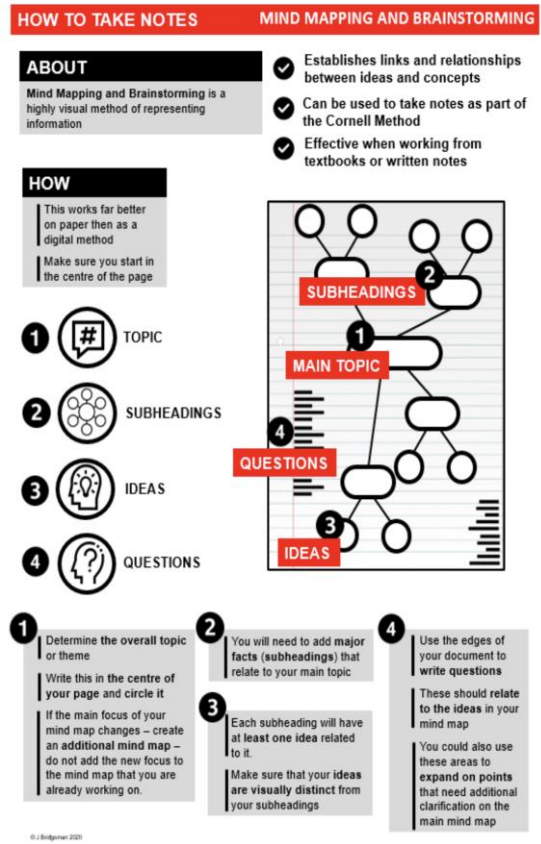
The client stated that my website should include at least five pages, this part of the criteria that the client set was easy to follow and I have fully achieved the creation of these five pages. The navigation of my website is efficient and effective as I have linked it to internal pages and all the links function correctly. I particularly like my logo as I believe that it fits in with the colour scheme correctly and I like the font of the text on my logo. To improve my website, I could rearrange the layout of images and text on the Acts page because it currently has odd looking spaces between the images and the text looks like it is squashed in the middle unintentionally since it is much smaller than the images. This would make the user more likely to stay on the website because it looks better. I could also change the colour scheme to incorporate some green or blue to help it fit the eco theme (trees, sky, plants etc), and therefore help the branding and image left in the user's mind

Examples

The use of colour in my website is a vital item to get right because it is one of the main things you see when you open a website. Green is one of the main colours in the website because it represents nature and energy. Green helps to add to the Eco theme and the festival. Also blue was include which represents the sky and open spaces, like the festival. This was successful because it added to the website feel and met the brief. I think that I ticked all the boxes outlined in the Client Brief and used suitable pictures, videos, sounds and other interactive elements to engage that wide target audience. I would be interested in surveying the users of the EcoFest website over the coming months to gauge their opinion of the site and improve the site based on their feedback. This would improve the site greatly because getting real life feedback would help streamline the experience of using the site.

Mindmap

Mind maps are a great way to revise key information. Have a read through the information on your ***OPTION SUBJECT*** and then use the information below to help you create mind maps.



Fancy some additional Class Charts points? Impress your teachers with any of these BHAmazing pieces of vocabulary, and they will award you extra CC points. Challenge: Can you use them in any sentences and show a member of the Senior Leadership Team?

Word List 1	Word List 2	Word List 3	Word List 4	Word List 5	Word List 6	Word List 7
Myriad (adjective) – many	**Caustic** (adjective) – mean / harsh	**Tension** (noun) – feeling of anxiety or nervousness	**Omniscient** (adjective) – all-knowing	**Sentimental** (adjective) – emotional	**Oppressed** (adjective) – subjected to cruel mistreatment	**Metamorphosis** (noun) – a change / transformation
Assert (verb) – state a fact confidently or forcefully	**Elucidate** (verb) – to make clear	**Oblivious** (adjective) – unaware	**Gullible** (adjective) – believes things easily	**Bawdy** (adjective) – rude or vulgar	**Subservient** (adjective) – obedient / submissive	**Abhorrent** (adjective) – repulsive
Egregious (adjective) - outstandingly bad	**Esoteric** (adjective) – likely to only be understood by a small number or people / obscure	**Naïve** (adjective) – Inexperienced / unaware	**Supercilious** (adjective) – arrogant	**Hypermasculine** (adjective) – overly masculine	**Exploit** (verb) – to use someone for your own good	**Abhor** (verb) – to hate
Erroneous (adjective)- wrong	**Tenuous** (adjective) – weak or fragile	**Pretentious** (adjective) – arrogant	**Tyrannical** (adjective) – a cruel dictator	**Atavistic** (adjective) – has characteristics of an earlier generation	**Epiphany** (noun) – a sudden realization	**Fate** (adjective) – destiny
Engender (verb) – to cause	**Perfunctory** (adjective) – carried out with minimal effort	**Pompous** (adjective) – arrogant	**Brazen** (adjective) – bold, shameless	**Troglodytic** (adjective) – like a caveman	**Façade** (noun) – a front (to 'wear a façade' means you wear a metaphorical mask, covering your true emotions or character)	**Integral** (adjective) – important
Employ (verb) – to make use of	**Moral** (noun) – a lesson	**Privileged** (adjective) – having an advantage over other, usually wealth	**Elusive** (adjective) – mysterious	**Apathetic** (adjective) – indifferent / lazy	**Microcosm** (noun) – a smaller community which represents a larger one	**Demise** (noun) – a person's downfall or death
Salient (adjective) – most noticeable and important	**Autonomy** (noun) – independence	**Compassionate** (adjective) – sympathetic	**Chauvinistic** (adjective) – has an attitude of superiority to opposite sex	**Segregated** (adjective) - separated	**Aloof** (adjective) – stand-offish	**Ridicule** (verb) – to make fun of
Advantageous (adjective) – providing an advantage / beneficial	**Assertive** (adjective) – confidence	**Vindictive** (adjective) – spiteful, cruel	**Materialistic** (adjective) – cares for objects and commodities	**Misogynistic** (adjective) – hateful towards women	**Degenerate** (adjective) – disgusting	**Deride** (verb) – to mock
Galvanize (verb) – to shock or excite someone into action	**Conceited** (adjective) – excessively proud / vain	**Duplicitous** (adjective) – having two sides	**Prophetic** (adjective) – able to accurately predict	**Choleric** (adjective) – quick-tempered, angry	**Depraved** (adjective) – immoral / evil	**Contempt** (noun) – hate
Substantiate (verb) – to provide evidence	**Superior** (adjective) – better than	**Narcissistic** (adjective) – self-obsessed	**Impulsive** (adjective) – rash / careless	**Secular** (adjective) – not religious	Feral (adjective) – wild	**Hysterical** (adjective) – uncontrolled emotion

My BHAmazing vocabulary, written in sentences:

1.

2.

3.

4.

5.

6.

7.